

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

BIBLIOGRAPHY OF PUBLICATIONS RELATED TO THE
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT
PREPARED BY U.S. GEOLOGICAL SURVEY PERSONNEL
THROUGH APRIL 1991

By

V.M. Glanzman

Open-File Report 91-341

Prepared in cooperation with the
Nevada Operations Office
U.S. Department of Energy
(Interagency Agreement DE-AI08-78ET44802)

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature

Denver, Colorado
1991

**Copies of this Open-File Report
may be purchased from**

**Books and Open-File Reports Section
Branch of Distribution
U.S. Geological Survey
Box 25425 Federal Center
Denver, Colorado 80225**

PREPAYMENT IS REQUIRED

**Price information will be published
in the monthly listing
"New Publications of the Geological Survey"**

FOR ADDITIONAL ORDERING INFORMATION

**CALL: Commercial: (303) 236-7476
FTS: 776-7476**

USGS-OFR-91-341

USGS-OFR-91-341

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

BIBLIOGRAPHY OF PUBLICATIONS RELATED TO THE
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT
PREPARED BY U.S. GEOLOGICAL SURVEY PERSONNEL
THROUGH APRIL 1991

By

V.M. Glanzman

Open-File Report 91-341

CONTENTS

	Page
Abstract	1
Introduction	1
Description of bibliography	2
Ordering information for Geological Survey publications	2
References cited	8
Publications	9
Abstracts	35
Index	48

ILLUSTRATIONS

Figure 1.	Index map of Yucca Mountain and vicinity	3
2.	Geologic maps of the Yucca Mountain region	4
3.	Surficial geologic maps of the Yucca Mountain region	5
4.	Gravity maps of the Yucca Mountain region	6
5.	Aeromagnetic maps of the Yucca Mountain region	7

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

**BIBLIOGRAPHY OF PUBLICATIONS RELATED TO THE
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT
PREPARED BY U.S. GEOLOGICAL SURVEY PERSONNEL
THROUGH APRIL 1991**

By

V.M. Glanzman

ABSTRACT

Personnel of the U.S. Geological Survey have participated in nuclear-waste management studies in the State of Nevada since the mid-1970's. A bibliography of publications prepared principally for the U.S. Department of Energy Yucca Mountain Site Characterization Project (formerly Nevada Nuclear Waste Storage Investigations) through April 1991 contains 475 entries in alphabetical order. The listing includes publications prepared prior to the inception of the Nevada Nuclear Waste Storage Investigations Project in April 1977 and selected publications of interest to the Yucca Mountain region.

INTRODUCTION

The U.S. Geological Survey has been involved in nuclear-waste management studies in Nevada since the mid-1970's. Early studies include those by Ekren and others (1974) regarding geologic and hydrologic considerations for various concepts of disposal within the conterminous United States. Under the Nuclear Waste Terminal Storage Program (NWTSP) established in 1976, the Geological Survey performed studies to evaluate various geologic media in the State of Nevada (Schneider and others, 1982). Studies included geologic mapping of the Lone Mountain pluton (Maldonado, 1984), an inventory of granitic rock masses in the State of Nevada (Spengler and others, 1979), and an inventory of clay-rich bedrock and metamorphic derivatives in eastern Nevada (Simpson and others, 1979).

Following the establishment of the Nevada Nuclear Waste Storage Investigations (NNWSI) program in April 1977, the Geological Survey studies were focused on locating and characterizing rock masses at the Nevada Test Site (NTS, fig. 1) that could provide suitable host media for disposal of high-level nuclear waste. Areas of investigation were Syncline Ridge, Twinridge, and Timber Mountain. In 1978, the southwestern part of the NTS was deemed suitable for further exploration, and studies were undertaken in the areas of the Calico Hills, Wahmonie Flat, and Yucca Mountain (fig. 1). Regional studies of tectonics, volcanism, and erosion rates in the southern Great Basin were also initiated. A seismic network was established within a 160-km radius of NTS to locate and study earthquakes (Rogers and others, 1981). Hydrologic studies focused on determination of present and past hydrologic regimes of the NTS area. In mid-1979, Yucca Mountain was selected as the area for concentrated studies, the emphasis being on the thick tuff units beneath the water table.

The emphasis in the United States and in all foreign programs for developing permanent disposal facilities had concentrated on the saturated zone (Roseboom, 1983). A Peer Review Committee for the Yucca Mountain site raised the question of possible

use of the unsaturated zone in early 1982. Geological Survey scientists subsequently recommended to the U.S. Department of Energy that the unsaturated zone at Yucca Mountain could provide a favorable environment for storage of radioactive waste. The Geological Survey also provided recommendations to the Nuclear Regulatory Commission (NRC), regarding draft rule 10 CFR Part 60, to include the unsaturated zone in repository studies. The NRC subsequently modified the draft rule to include both the saturated and unsaturated zones (Roseboom, 1983). The Nuclear Waste Policy Act of 1982 (signed in January 1983) established the Office of Civilian Radioactive Waste Management (OCRWM) within the Department of Energy; OCRWM subsequently identified Yucca Mountain as one of nine potentially acceptable sites for characterization. In December 1987, Congress amended the Nuclear Waste Policy Act to focus site characterization efforts on the Yucca Mountain site (U.S. Department of Energy, 1990). The NNWSI was renamed the Yucca Mountain Project in 1988, and subsequently the Yucca Mountain Site Characterization Project in 1990.

DESCRIPTION OF BIBLIOGRAPHY

This compilation is an alphabetical listing of publications, including abstracts for meetings and symposia, prepared by Geological Survey personnel on radioactive-waste disposal studies in the NTS area. The majority of publications in this bibliography were prepared under the cooperative program with the U.S. Department of Energy (Interagency Agreement DE-AI08-78ET44802, formerly EW-78-A-08-1543). The listing includes publications of early reconnaissance studies and the Yucca Mountain Site Characterization Project through April 1991. Additional selected publications of interest to the Yucca Mountain region, although not prepared under the cooperative program, have also been included. Figures 2 through 5 show geologic, surficial geologic, gravity, and aeromagnetic map coverage of the Yucca Mountain region at varying scales up to 1:100,000. Maps at scales of 1:250,000 and greater are not shown on the figures. Entries in the Index are keyed to the numbers of the listed publications.

ORDERING INFORMATION FOR GEOLOGICAL SURVEY PUBLICATIONS

Book publications of the Geological Survey may be obtained from the Books and Open-File Reports Section, U.S. Geological Survey, Box 25425 Federal Center, Denver, Colo. 80225. U.S. Geological Survey maps may be obtained from the Map Distribution Section, U.S. Geological Survey, Box 25286 Federal Center, Denver, Colo. 80225. For additional ordering information the reader is referred to U.S. Geological Survey Circular 900. Reports with the designation USGS-1543-xx may be ordered from the U.S. Department of Commerce, National Technical Information Service, Springfield, Va. 22161.

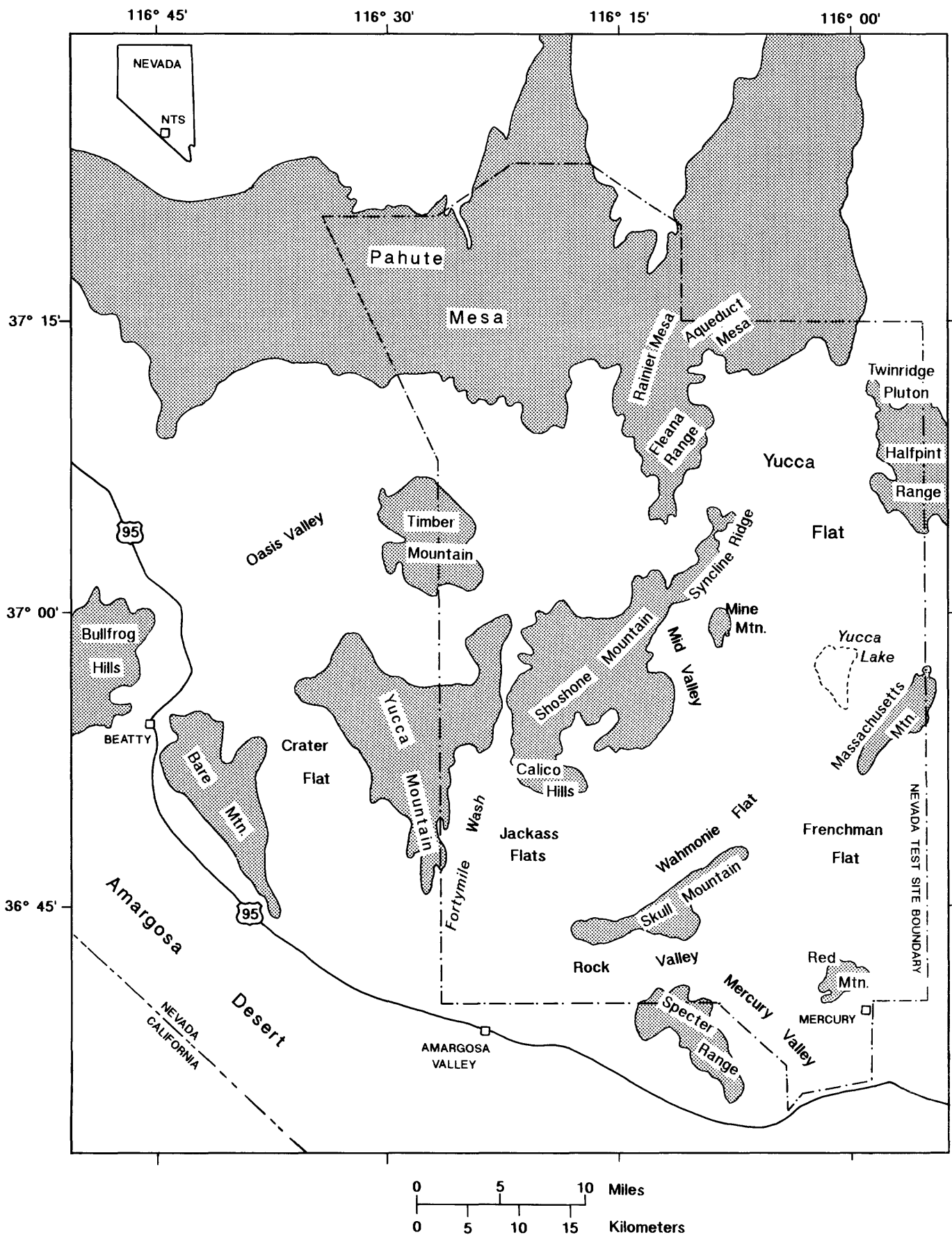


Figure 1.--Index map of Yucca Mountain and vicinity.

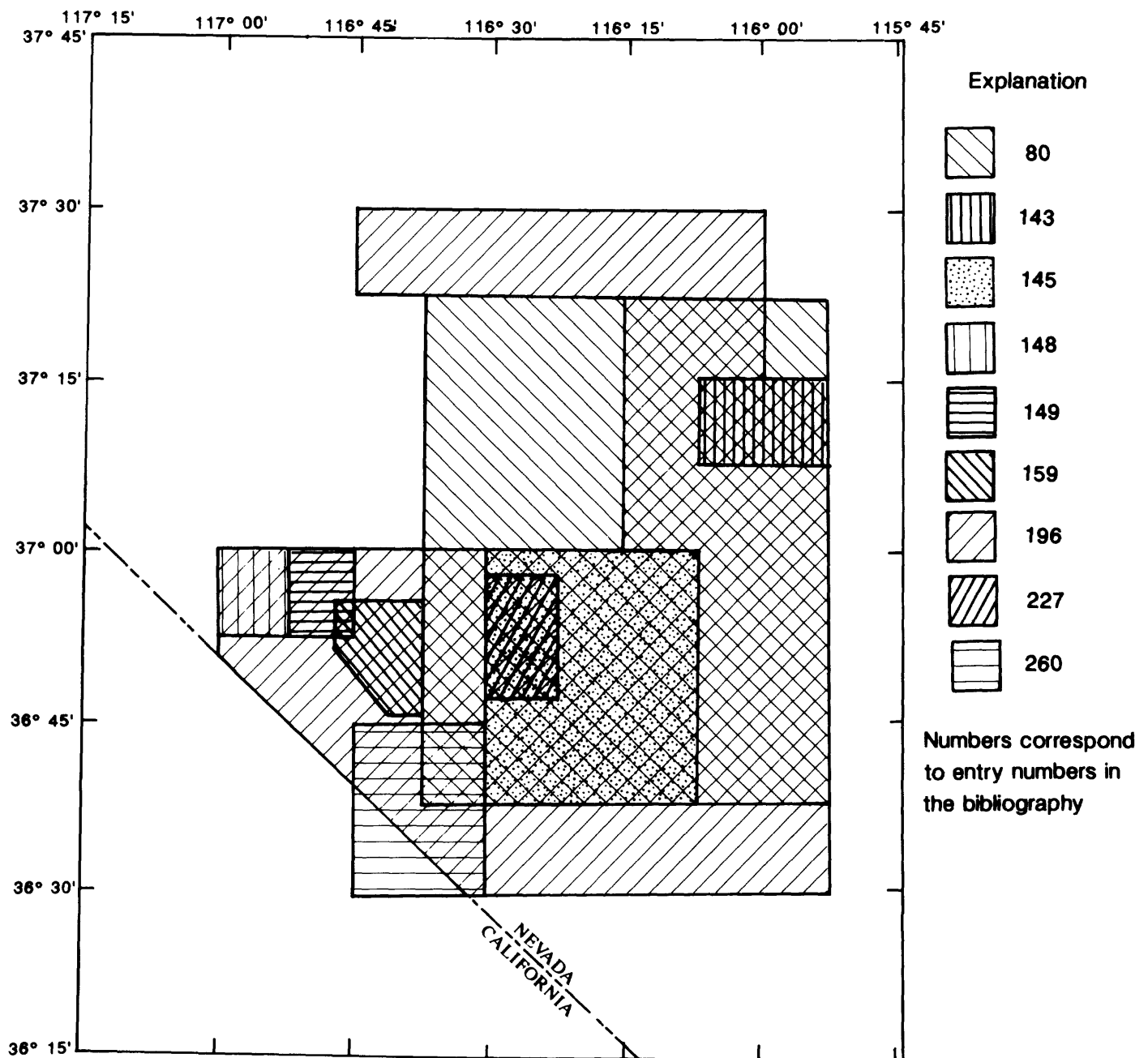


Figure 2.--Geologic maps of the Yucca Mountain region (irregular and overlap boundaries are approximate).

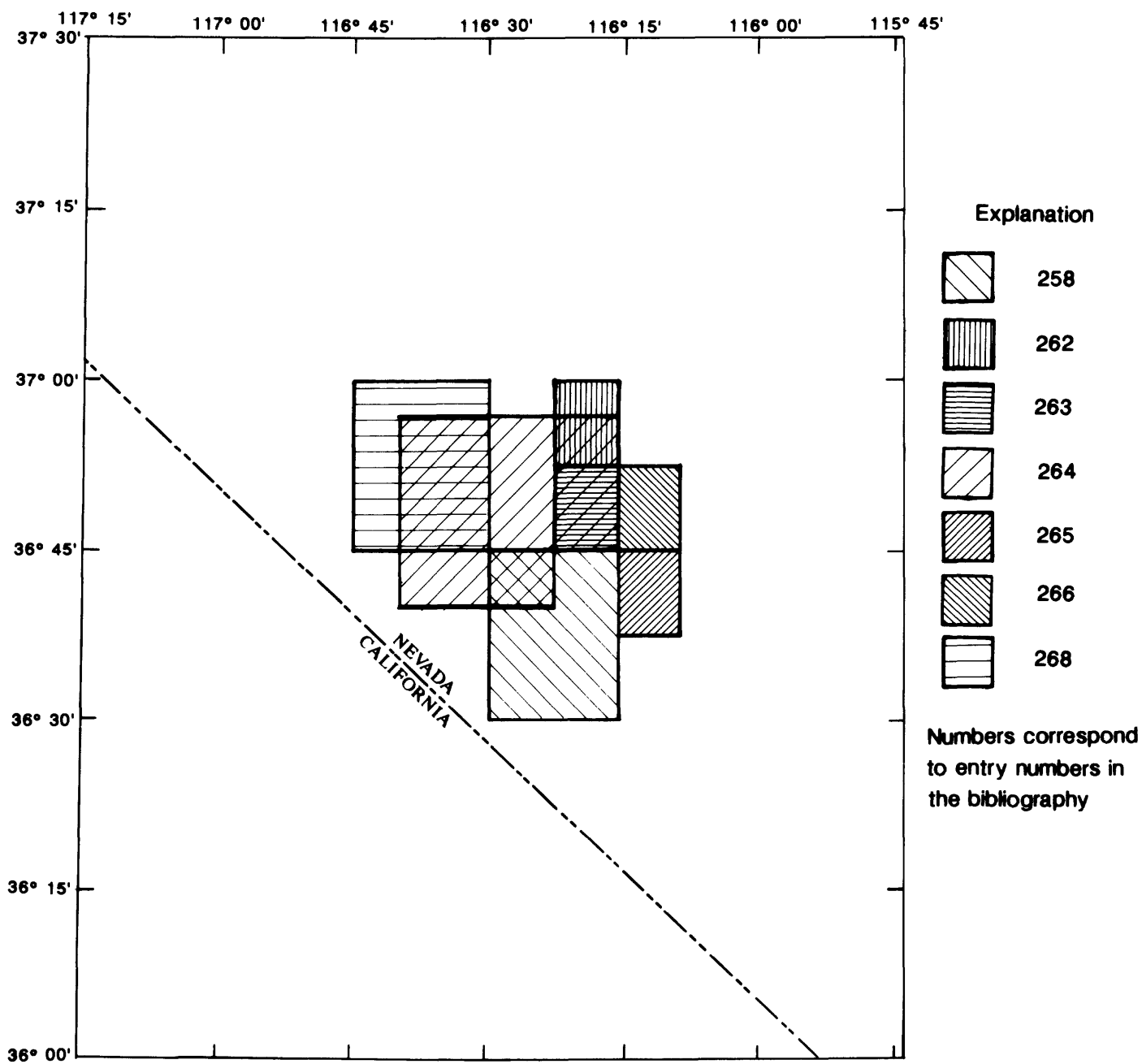


Figure 3.--Surficial geologic maps of the Yucca Mountain region (irregular and overlap boundaries are approximate).

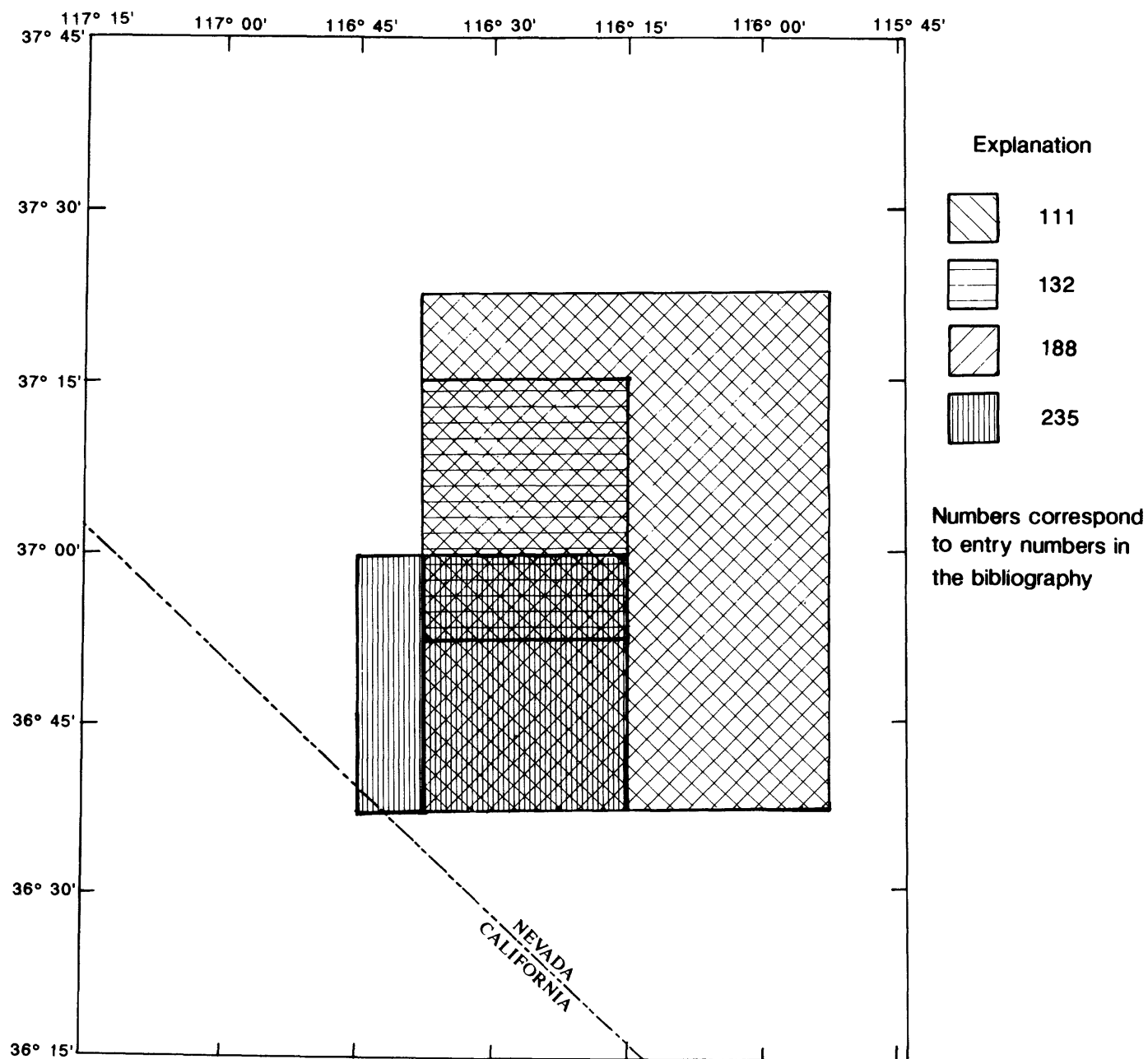


Figure 4.--Gravity maps of the Yucca Mountain region (irregular and overlap boundaries are approximate).

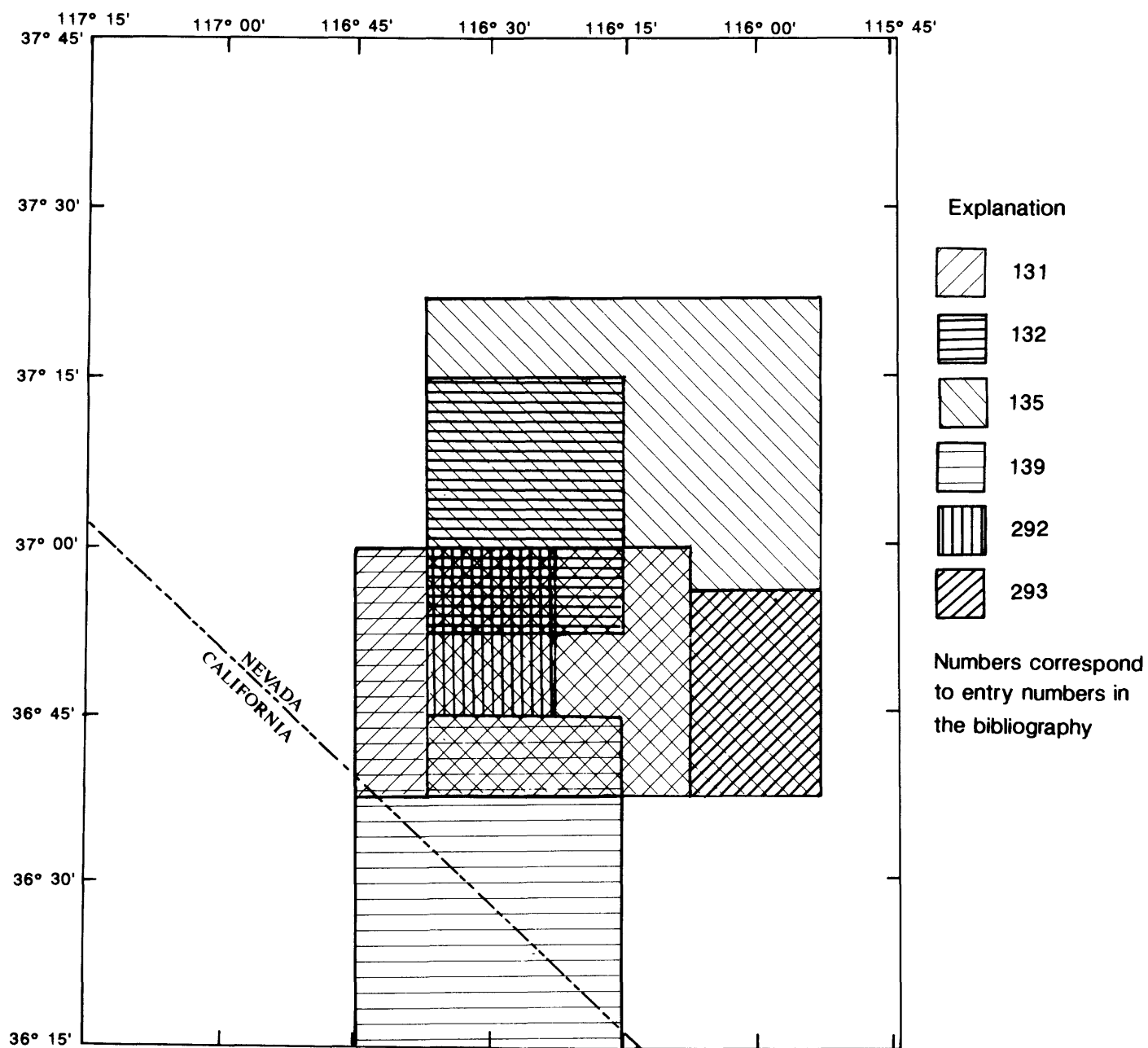


Figure 5.--Aeromagnetic maps of the Yucca Mountain region (irregular and overlap boundaries are approximate).

REFERENCES CITED

- Ekren, E.B., Dinwiddie, G.A., Mytton, J.W., Thordarson, William, Weir, J.E., Jr., Hinrichs, E.N., and Schroder, L.J., 1974, Geologic and hydrologic considerations for various concepts of high-level radioactive waste disposal in conterminous United States: U.S. Geological Survey Open-File Report 74-158, 219 p. (NNA.910814.0002)
- Maldonado, Florian, 1984, Bedrock geologic map of the Lone Mountain pluton area, Esmeralda County, Nevada: U.S. Geological Survey Miscellaneous Investigations Series Map I-1533, scale 1:24,000. (NNA.910814.0003)
- Rogers, A.M., Harmsen, S.C., and Carr, W.J., 1981, Southern Great Basin seismological data report for 1980 and preliminary data analysis: U.S. Geological Survey Open-File Report 81-1086, 148 p. (NNA.870518.0068)
- Roseboom, E.H., Jr., 1983, Disposal of high-level nuclear waste above the water table in arid regions: U.S. Geological Survey Circular 903, 21 p. (NNA.870824.0061)
- Schneider, Robert, Roseboom, E.H., Jr., Robertson, J.B., and Stevens, P.R., 1982, U.S. Geological Survey research in radioactive waste disposal--Fiscal Year 1979: U.S. Geological Survey Circular 847, 74 p. (NNA.910814.0004)
- Simpson, H.E., Weir, J.W., Jr., and Woodward, L.A., 1979, Inventory of clay-rich bedrock and metamorphic derivatives in eastern Nevada, excluding the Nevada Test Site: U.S. Geological Survey Open-File Report 79-760, 147 p. (NNA.910814.0005)
- Spengler, R.W., Maldonado, Florian, Weir, J.E., Jr., and Dixon, G.L., 1979, Inventory of granitic masses in the State of Nevada: U.S. Geological Survey Open-File Report 81-1349, 50 p. (NNA.900126.0190)
- U.S. Department of Energy, 1990, Yucca Mountain Project Bibliography 1988-1989: U.S. Department of Energy Report DOE/OSTI-3406 (Suppl. 2), 177 p.

Numbers in parenthesis are for U.S. Department of Energy OCRWM management purposes and should not be used when ordering these publications.

PUBLICATIONS

1. Ackermann, H.D., Mooney, W.D., Snyder, D.B., and Sutton, V.D., 1988, Preliminary interpretation of seismic-refraction and gravity studies west of Yucca Mountain, Nevada and California, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 23-34.
2. Anderson, L.A., 1981, Rock property analysis of core samples from the Calico Hills UE25a-3 borehole, Nevada Test Site, Nevada: U.S. Geological Survey Open-File Report 81-1337, 30 p.
3. Anderson, L.A., 1981, Rock property analysis of core samples from the Yucca Mountain UE25a-1 borehole, Nevada Test Site, Nevada: U.S. Geological Survey Open-File Report 81-1338, 36 p.
4. Anderson, L.A., 1984, Rock-property measurements on large-volume core samples from Yucca Mountain USW GU-3/G-3 and USW G-4 boreholes, Nevada Test Site, Nevada: U.S. Geological Survey Open-File Report 84-552, 39 p.
5. Anderson, L.A., in press, Results of rock property measurements made on core samples from Yucca Mountain boreholes, Nevada Test Site, Nevada, Part 1. Boreholes UE25a-4, -5, -6, and -7. Part 2. Borehole UE25p#1: U.S. Geological Survey Open-File Report 90-474.
6. Anderson, L.A., Bisdorf, R.J., and Schoenthaler, D.R., 1980, Resistivity sounding investigation by the Schlumberger method in the Syncline Ridge area, Nevada Test Site, Nevada: U.S. Geological Survey Open-File Report 80-466, 54 p.
7. Baldwin, M.J., and Jahren, C.E., 1982, Magnetic properties of drill core and surface samples from the Calico Hills area, Nye County, Nevada: U.S. Geological Survey Open-File Report 82-536, 27 p.
8. Barton, C.C., and Larsen, Eric, 1985, Fractal geometry of two-dimensional fracture networks at Yucca Mountain [sic], southwestern Nevada, *in* Proceedings of the International Symposium on Fundamentals of Rock Joints, Bjorkliden, Sweden, September 15-20, 1985: Centek Publishers, p. 77-84.
9. Barton, C.C., Page, W.R., and Morgan, T.L., 1989, Fractures in outcrops in the vicinity of drill hole USW G-4, Yucca Mountain, Nevada, data analysis and compilation: U.S. Geological Survey Open-File Report 89-92, 133 p.
10. Bath, G.D., and Jahren, C.E., 1984, Interpretations of magnetic anomalies at a potential repository site located in the Yucca Mountain area, Nevada Test Site: U.S. Geological Survey Open-File Report 84-120, 40 p.
11. Bath, G.D., and Jahren, C.E., 1985, Investigation of aeromagnetic anomaly on west side of Yucca Mountain, Nevada: U.S. Geological Survey Open-File Report 85-459, 24 p.
12. Benson, L.V., and McKinley, P.W., 1985, Chemical composition of ground water in the Yucca Mountain area, Nevada, 1971-84: U.S. Geological Survey Open-File Report 85-484, 10 p.

13. Benson, L.V., Robison, J.H., Blankennagel, R.K., and Ogard, A.E., 1983, Chemical composition of ground water and the locations of permeable zones in the Yucca Mountain area, Nevada: U.S. Geological Survey Open-File Report 83-854, 19 p.
14. Bentley, C.B., 1984, Geohydrologic data for well USW G-4, Yucca Mountain area, Nye County, Nevada: U.S. Geological Survey Open-File Report 84-63, 48 p.
15. Bentley, C.B., Robison, J.H., and Spengler, R.W., 1983, Geohydrologic data for well USW H-5, Yucca Mountain area, Nye County, Nevada: U.S. Geological Survey Open-File Report 83-853, 34 p.
16. Blakley, R.J., 1988, Curie-temperature isotherm analysis and tectonic implications of aeromagnetic data from Nevada: *Journal of Geophysical Research*, v. 93, no. B10, p. 11,817-11,832.
17. Bradbury, J.P., 1987, Late Holocene diatom paleolimnology of Walker Lake, Nevada: *Archiv fur Hydrobiologie*, Suppl. 79, v. 1, p. 1-27.
18. Bradbury, J.P., Forester, R.M., and Thompson, R.S., 1988, Late Quaternary paleolimnology of Walker Lake, Nevada: *Journal of Paleolimnology*, v. 1, p. 249-267.
19. Brocher, T.M., Hart, P.E., and Carle, S.F., 1990, Feasibility study of the seismic reflection method in Amargosa Desert, Nye County, Nevada: U.S. Geological Survey Open-File Report 89-133, 150 p.
20. Brogan, G.E., Kellogg, K.S., and Terhune, C.L., in press, Late Quaternary faulting along the Death Valley/Furnace Creek Fault system, California and Nevada: U.S. Geological Survey Bulletin 1991.
21. Broxton, D.E., Warren, R.G., Byers, F.M., and Scott, R.B., 1989, Chemical and mineralogic trends within the Timber Mountain-Oasis Valley caldera complex, Nevada: Evidence for multiple cycles of chemical evolution in a long-lived magma system: *Journal of Geophysical Research*, v. 94, no. B5, p. 5961-5985.
22. Bush, Charles, Bunker, Carl, and Spengler, Richard, 1983, Radioelement distribution in drill hole USW-G1, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 83-847, 15 p.
23. Byerlee, J., Morrow, C., and Moore, D., 1983, Permeability and pore-fluid chemistry of the Bullfrog Tuff in a temperature gradient: Summary of results: U.S. Geological Survey Open-File Report 83-475, 26 p.
24. Carr, M.D., 1989, Mouth of Fluorspar Canyon--geology of northern Bare Mountain, in *Geological Society of America 1989 Field Trip Guidebook*, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 17.
25. Carr, M.D., and Monsen, S.A., 1988, A field trip guide to the geology of Bare Mountain, in Weide, D.L., and Faber, M.L., eds., *This extended land, geological journeys in the southern Basin and Range*: Geological Society of America, Cordilleran Section, Field Trip Guidebook, p. 50-57.

26. Carr, M.D., Waddell, S.J., Vick, G.S., Stock, J.M., Monsen, S.A., Harris, A.G., Cork, B.S., and Byers, F.M., Jr., 1986, Geology of drill hole UE-25p#1: A test hole to pre-Tertiary rocks near Yucca Mountain, southern Nevada: U.S. Geological Survey Open-File Report 86-175, 87 p.
27. Carr, M.D., and Yount, J.C., eds., 1988, Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, 152 p.
28. Carr, W.J., 1982, Volcano-tectonic history of Crater Flat, southwestern Nevada, as suggested by new evidence from drill hole USW-VH-1 and vicinity: U.S. Geological Survey Open-File Report 82-457, 23 p.
29. Carr, W.J., 1984, Regional structural setting of Yucca Mountain and Late Cenozoic rates of tectonic activity in part of the southwestern Great Basin, Nevada and California: U.S. Geological Survey Open-File Report 84-854, 109 p.
30. Carr, W.J., 1988, Volcano-tectonic setting of Yucca Mountain and Crater Flat, southwestern Nevada, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 35-50.
31. Carr, W.J., Byers, F.M., Jr., and Orkild, P.P., 1986, Stratigraphic and volcano-tectonic relations of Crater Flat Tuff, Nevada Test Site region, Nye County, Nevada: U.S. Geological Survey Professional Paper 1323, 28 p. (supersedes Open-File Report 84-114).
32. Carr, W.J., and Parrish, L.D., 1985, Geology of drill hole USW VH-2 and structure of Crater Flat, southwestern Nevada: U.S. Geological Survey Open-File Report 85-475, 41 p.
33. Carr, W.J., and Rogers, A.M., 1982, Tectonics, seismicity, volcanism, and erosion rates in the southern Great Basin, *in* U.S. Geological survey research in radioactive waste disposal--fiscal year 1979: U.S. Geological Survey Circular 847, p. 7-10.
34. Carr, W.J., and Rogers, A.M., 1982, Tectonics, seismicity, volcanism, and erosion rates in the southern Great Basin, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1980: U.S. Geological Survey Open-File Report 82-509, p. 11-15.
35. Carr, W.J., and Rogers, A.M., 1983, Tectonics, seismicity, and volcanism of the southern Great Basin, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1981: U.S. Geological Survey Water-Resources Investigations Report 83-4105, p. 13-22.
36. Carr, W.J., Rogers, A.M., and Crowe, B.M., 1984, Nevada Test Site and vicinity; tectonics, seismicity, and volcanism of the southern Great Basin, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1982: U.S. Geological Survey Water-Resources Investigations Report 84-4205, p. 19-28.
37. Christensen, R.C., and Spahr, N.E., 1980, Flood potential of Topopah Wash and tributaries, eastern part of Jackass Flats, Nevada Test Site, southern Nevada: U.S. Geological Survey Open-File Report 80-963, 22 p.

38. Chuchel, B.A., 1985, POLYGON - An interactive program for constructing and editing the geometries of polygons using a color graphics terminal: U.S. Geological Survey Open-File Reports 85-233-A, 38 p., 85-233-B, 91 p.
39. Coe, J.A., and Dueholm, K.S., in press, Geologic mapping of tunnels using photogrammetry--control point configuration: U.S. Geological Survey Open-File Report 90-3.
40. Coe, J.A., and Dueholm, K.S., in press, USGS photogrammetric drift mapping--camera and target positioning: U.S. Geological Survey Open-File Report 90-49.
41. Craig, R.W., 1986, Reply to discussion on article entitled, "A program to calculate aquifer transmissivity from specific-capacity data for programmable calculators": Ground Water, v. 24, no. 2, p. 238.
42. Craig, R.W., Johnson, K.A., 1984, Geohydrologic data for test well UE-25p#1, Yucca Mountain area, Nye County, Nevada: U.S. Geological Survey Open-File Report 84-450, 63 p.
43. Craig, R.W., Reed, R.L., and Spengler, R.W., 1983, Geohydrologic data for well USW H-6, Yucca Mountain area, Nye County, Nevada: U.S. Geological Survey Open-File Report 83-856, 35 p.
44. Craig, R.W., and Robison, J.H., 1984, Geohydrology of rocks penetrated by test well UE-25p#1, Yucca Mountain area, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 84-4248, 57 p.
45. Crowe, B.M., and Carr, W.J., 1980, Preliminary assessment of the risk of volcanism at a proposed nuclear waste repository in the southern Great Basin: U.S. Geological Survey Open-File report 80-357, 15 p.
46. Crowe, B.M., and Sargent, K.A., 1979, Major-element geochemistry of the Silent Canyon-Black Mountain peralkaline volcanic centers, northwestern Nevada Test Site: Applications to an assessment of renewed volcanism: U.S. Geological Survey Open-File Report 79-926, 25 p.
47. Czarnecki, J.B., 1984, Simulated effects of increased recharge on the ground-water flow system of Yucca Mountain and vicinity, Nevada-California: U.S. Geological Survey Water-Resources Investigations Report 84-4344, 33 p.
48. Czarnecki, J.B., 1989, Characterization of the subregional ground-water flow system of Yucca Mountain and vicinity, Nevada-California: Radioactive Waste Management and the Nuclear Fuel Cycle, v. 13, p. 51-61.
49. Czarnecki, J.B., 1990, Geohydrology and evapotranspiration of Franklin Lake Playa, Inyo County, California: U.S. Geological Survey Open-File Report 90-356, 96 p.
50. Czarnecki, J.B., 1990, Hydrologic, meteorological, and unsaturated-zone moisture-content data, Franklin Lake Playa, Inyo County, California: U.S. Geological Survey Open-File Report 89-595, 38 p.

51. Czarnecki, J.B., and Luckey, R.R., 1989, Regional and local flow near Yucca Mountain, Nevada, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 32-33.
52. Czarnecki, J.B., and Waddell, R.K., 1985, Finite-element simulation of ground-water flow in the vicinity of Yucca Mountain, Nevada-California: U.S. Geological Survey Water-Resources Investigations Report 84-4349, 38 p.
53. Daniels, J.J., and Scott, J.H., 1980, Borehole geophysical measurements for hole UE25a-3, Nevada Test Site, Nuclear Waste Isolation Program: U.S. Geological Survey Open-File Report 80-126, 30 p.
54. Daniels, J.J., and Scott, J.H., 1981, Interpretation of hole- to-surface resistivity measurements at Yucca Mountain, Nevada Test Site: U.S. Geological Survey Open-File Report 81-1336, 23 p.
55. Daniels, J.J., Scott, J.H., and Hagstrum, J.T., 1981, Interpretation of geophysical well-log measurements in drill holes UE25a-4, -5, -6, and -7, Yucca Mountain, Nevada Test Site: U.S. Geological Survey Open-File Report 81-389, 29 p.
56. Diehl, S.F., and Chornack, M.P., 1990, Stratigraphic correlation and petrography of the bedded tuffs, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 89-3, 152 p.
57. Dinwiddie, G.A., and Weir, J.E., Jr., 1979, Summary of hydraulic tests and hydrologic data for holes UE16d and UE16f, Syncline Ridge area, Nevada Test Site: U.S. Geological Survey report USGS-1543-3, 25 p.
58. Dixon, G.L., and Glanzman, V.M., 1982, Search for potential sites, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1980: U.S. Geological Survey Open-File Report 82-509, p. 7-11.
59. Dixon, G.L., and Glanzman, V.M., 1983, Search for potential sites, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1981: U.S. Geological Survey Water-Resources Investigations Report 83-4105, p. 7-12.
60. Dixon, G.L., and Glanzman, V.M., 1984, Nevada Test Site and vicinity; search for potential sites, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1982: U.S. Geological Survey Water-Resources Investigations Report 84-4205, p. 8-18.
61. Dixon, G.L., and Hoover, D.B., 1982, Search for potential sites, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1979: U.S. Geological Survey Circular 847, p. 4-7.
62. Dudley, W.W., Jr. (ed.), 1978, Nevada Test Site, *in* National Terminal Waste Storage Program Progress Report for Period October 1, 1976, to September 30, 1977: Union Carbide Corporation, Office of Waste Isolation, Report Y/OWI-9, p. 39-52.
63. Dudley, W.W., Jr., 1989, U.S. Geological Survey, *in* Yucca Mountain: Geoscientists help make 10,000-year decision: *Geotimes*, v. 34, no. 1, p. 16-17.

64. Dudley, W.W., Jr., 1990, Multidisciplinary hydrologic investigations at Yucca Mountain, *in* High Level Radioactive Waste Management, International Topical Meeting Proceedings: American Nuclear Society and American Society of Civil Engineers, v. 1, p. 1-9.
65. Dudley, W.W., Jr., Wilson, W.E., and Hoxie, D.T., 1990, Hydrologic framework of the Yucca Mountain area, Nevada, *in* Sinha, R.S., ed., Proceedings, International Symposium on Unique Underground Structures, Denver, Colorado, June 12-15, 1990: Colorado School of Mines and U.S. Bureau of Reclamation, v. 2, p. 57-1 through 57-20.
66. Ekren, E.B., Dinwiddie, G.A., Mytton, J.W., Thordarson, William, Weir, J.E., Jr., Hinrichs, E.N., and Schroder, L.J., 1974, Geologic and hydrologic considerations for various concepts of high-level radioactive waste disposal in conterminous United States: U.S. Geological Survey Open-File Report 74-158, 219 p.
67. Ellis, W.L., and Swolfs, H.S., 1983, Preliminary assessment of in situ geomechanical characteristics in drill hole USW G-1, Yucca Mountain, Nevada: U.S. Geological Survey Open-File Report 83-401, 18 p.
68. Erickson, J.R., and Waddell, R.K., 1985, Identification and characterization of hydrologic properties of fractured tuff using hydraulic and tracer tests--test well USW H-4, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 85-4066, 30 p.
69. Fairer, G.M., Whitney, J.W., and Coe, J.A., 1989, A close-range photogrammetric technique of mapping neotectonic features in trenches at Yucca Mountain, Nevada: Bulletin of the Association of Engineering Geologists, v. 26, no. 4, p. 521-530.
70. Fitterman, D.V., 1982, Magnetometric resistivity survey near Fortymile Wash, Nevada Test Site, Nevada: U.S. Geological Survey Open-File Report 82-401, 27 p.
71. Flanigan, V.J., 1979, A slingram survey on the Nevada Test Site - Part of an integrated geologic-geophysical study of site evaluation for nuclear waste disposal: U.S. Geological Survey Open-File Report 79-277, 30 p.
72. Flanigan, V.J., 1981, A slingram survey at Yucca Mountain on the Nevada Test Site: U.S. Geological Survey Open-File Report 81-980, 38 p.
73. Flint, A.L., 1989, Characterization of the unsaturated zone infiltration, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 31.
74. Forester, R.M., in press, Ostracode assemblages from springs in the western United States: Implications for paleohydrogeology, *in* Williams, D.D., and Banks, H.V., eds., Arthropods of springs with particular reference to Canada: Entomological Society of Canada Memoir 155.
75. Fouty, S.C., 1984, Index to published geologic maps in the region around the potential Yucca Mountain nuclear waste repository site, southern Nye County, Nevada: U.S. Geological Survey Open-File Report 84-524, 31 p.

76. Fox, K.F., Jr., and Carr, M.D., 1988, Neotectonics and volcanism at Yucca Mountain and vicinity, Nevada, *in* Transactions of the American Nuclear Society: American Nuclear Society, v. 56, p. 210-211.
77. Fox, K.F., Jr., and Carr, M.D., 1989, Neotectonics and volcanism at Yucca Mountain and vicinity, Nevada: Radioactive Waste Management and the Nuclear Fuel Cycle, v. 13, p. 37-50.
78. Fox, K.F., Jr., Spengler, R.W., and Myers, W.B., 1990, Geologic framework and Cenozoic evolution of the Yucca Mountain area, Nevada, Nevada, *in* Sinha, R.S., ed., Proceedings, International Symposium on Unique Underground Structures, Denver, Colorado, June 12-15, 1990: Colorado School of Mines and U.S. Bureau of Reclamation, v. 2, p. 56-1 through 56-18.
79. Frischknecht, F.C., and Raab, P.V., 1984, Time-domain electromagnetic soundings at the Nevada Test Site, Nevada: Geophysics, v. 49, no. 7, p. 981-992.
80. Frizzell, V.A., Jr., and Shulters, Jacqueline, 1990, Geologic map of the Nevada Test Site, southern Nevada: U.S. Geological Survey Miscellaneous Investigations Map I-2046, scale 1:100,000.
81. Furgerson, R.B., 1982, Remote-reference magnetotelluric survey Nevada Test Site and vicinity, Nevada and California, with an Introduction by D. B. Hoover: U.S. Geological Survey Open-File Report 82-465, 156 p.
82. Galloway, D.L., and Erickson, J.R., 1985, Tracer test for evaluating nonpumping intrawell-bore flow in fractured media: Transactions of the American Nuclear Society, v. 50, p. 192-193.
83. Galloway, Devin, and Rojstaczer, Stuart, 1989, Analysis of the frequency response of water levels in wells to earth tides and atmospheric loading: Fourth Canadian/American Conference on Hydrogeology, Proceedings, Banff, Alberta, June 21-24, 1988, p. 100-113.
84. Gawthrop, W.H., and Carr, W.J., 1988, Location refinement of earthquakes in the southwestern Great Basin, 1931-1974, and seismotectonic characteristics of some of the important events: U.S. Geological Survey Open-File Report 88-560, 64 p.
85. Gemmell, J.M., 1990, Water levels in periodically measured wells in the Yucca Mountain area, Nevada, 1988: U.S. Geological Survey Open-File Report 90-113, 47 p.
86. Glanzman, V.M., 1980, Bibliography of reports by U.S. Geological Survey personnel pertaining to underground nuclear testing and radioactive waste disposal at the Nevada Test Site and radioactive waste disposal at the WIPP site, New Mexico, January 1, 1979, to December 31, 1979: U.S. Geological Survey Open-File Report 80-817, 22 p.
87. Glanzman, V.M., 1981, Bibliography of reports by U.S. Geological Survey personnel pertaining to underground nuclear testing and radioactive waste disposal at the Nevada Test Site, and radioactive waste disposal at the Waste Isolation Pilot Plant site, New Mexico, January 1, 1980, to December 31, 1980: U.S. Geological Survey Open-File Report 81-892, 18 p.

88. Glanzman, V.M., 1983, Bibliography of reports by U.S. Geological Survey personnel on studies of underground nuclear test sites and on waste management studies at the Nevada Test Site and the Waste Isolation Pilot Plant site, New Mexico, January 1 to December 31, 1981: U.S. Geological Survey Open-File Report 83-478, 12 p.
89. Glanzman, V.M., 1984, Bibliography of reports by U.S. Geological Survey personnel on studies of underground nuclear test sites and on waste management studies at the Nevada Test Site and the Waste Isolation Pilot Plant site, New Mexico, January 1 to December 31, 1982: U.S. Geological Survey Open-File Report 84-23, 16 p.
90. Glanzman, V.M., 1985, Bibliography of reports by U.S. Geological Survey personnel on studies of underground nuclear test sites and on waste management studies at the Nevada Test Site and the Waste Isolation Pilot Plant site, New Mexico, January 1, 1983, to December 31, 1984: U.S. Geological Survey Open-File Report 85-363, 24 p.
91. Glanzman, V.M., 1986, Bibliography of reports by U.S. Geological Survey personnel on studies at the Nevada Test Site and the Waste Isolation Pilot Plant site, New Mexico, January 1, 1985, to December 31, 1985: U.S. Geological Survey Open-File Report 86-558, 16 p.
92. Glanzman, V.M., 1986, Nevada Test Site and vicinity, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal Years 1983, 1984, and 1985: U.S. Geological Survey Water-Resources Investigations Report 87-4009, p. 15-26.
93. Glanzman, V.M., 1988, Bibliography of reports by U.S. Geological Survey personnel on studies at the Nevada Test Site, released between January 1 and December 31, 1986: U.S. Geological Survey Open-File Report 88-366, 18 p.
94. Glen, J.M., and Ponce, D.A., in press, Aeromagnetic map of the Beatty quadrangle, Nevada-California: U.S. Geological Survey Open-File Report 91-105.
95. Greenhaus, M.R., and Zablocki, C.J., 1982, A Schlumberger resistivity survey of the Amargosa Desert, southern Nevada: U.S. Geological Survey Open-File Report 82-897, 150 p.
96. Hagstrum, J.T., Daniels, J.J., and Scott, J.H., 1980, Interpretation of geophysical well-log measurements in drill hole UE25a-1, Nevada Test Site, radioactive waste program: U.S. Geological Survey Open-File Report 80-941, 32 p.
97. Hagstrum, J.T., Daniels, J.J., and Scott, J.H., 1980, Analysis of the magnetic susceptibility well log in drill hole UE25a-5, Yucca Mountain, Nevada Test Site: U.S. Geological Survey Open-File Report 80-1263, 33 p.
98. Hamilton, W.B., 1988, Detachment faulting in the Death Valley region, California and Nevada, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 51-86.

99. Hammermeister, Dale, Blout, Daniel, and McDaniel, J.C., 1986, Drilling and coring methods that minimize the disturbance of cuttings, core, and rock formation in the unsaturated zone, Yucca Mountain, Nevada, *in* Proceedings, National Water Well Association Conference on Characterization and Monitoring of the Vadose (Unsaturated) Zone, Denver, Colorado, November 19-21, 1985, p. 507-541.
100. Hammermeister, Dale, Kneibler, Carolyn, and Klenke, John, 1986, Borehole calibration methods used in cased and uncased test holes to determine moisture profiles in the unsaturated zone, Yucca Mountain, Nevada, *in* Proceedings, National Water Well Association Conference on Characterization and Monitoring of the Vadose (Unsaturated) Zone, Denver, Colorado, November 19-21, 1985, p. 542-563.
101. Harden, J.W., 1988, Measurements of water penetration and volume percentage water-holding capacity for undisturbed, coarse-textured soils in southwestern California: *Soil Science*, v. 146, no. 5, p. 374-382.
102. Harden, J.W., Reheis, M.C., Sowers, J.M., and Slate, Janet, 1988, Comment on "Scanning electron microscope method for rock-varnish dating": *Geology*, v. 16, no. 11, p. 1051.
103. Harding, S.T., 1988, Preliminary results of high-resolution seismic-reflection surveys conducted across the Beatty and Crater Flat fault scarps, Nevada, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 121-128.
104. Harmsen, S.C., and Rogers, A.M., 1986, Inferences about the local stress field from focal mechanisms: Applications to earthquakes in the southern Great Basin of Nevada: *Bulletin of the Seismological Society of America*, v. 76, no. 6, p. 1560-1572.
105. Harmsen, S.C., and Rogers, A.M., 1988, Earthquake location data for the southern Great Basin of Nevada and California, 1984 through 1986: U.S. Geological Survey Open-File Report 87-596, 92 p.
106. Harrington, C.D., and Whitney, J.W., 1987, Scanning electron microscope method for rock-varnish dating: *Geology*, v. 15, p. 967-970.
107. Harris, R.N., and Ponce, D.A., 1988, High-precision gravity network to monitor temporal variations in gravity across Yucca Mountain, Nevada: U.S. Geological Survey Open-File Report 88-243, 19 p.
108. Harris, R.N., Ponce, D.A., Oliver, H.W., and Healey, D.L., 1989, Principal facts for about 16,000 gravity stations in the Nevada Test Site and vicinity: U.S. Geological Survey Open-File Report 89-682A, 78 p., 89-682B, 227 p.
109. Healey, D.L., Clutson, F.G., and Glover, D.A., 1986, Borehole gravity meter survey in drill hole USW G-4, Yucca Mountain area, Nye County, Nevada: U.S. Geological Survey Open-File Report 86-205, 18 p.
110. Healey, D.L., Clutson, F.G., and Glover, D.A., 1984, Borehole gravity meter surveys in drill holes USW G-3, UE-25p#1, and UE-25c#1, Yucca Mountain area, Nevada: U.S. Geological Survey Open-File Report 84-672, 16 p.

111. Healey, D.L., Harris, R.N., Ponce, D.A., and Oliver, H.W., 1987, Complete Bouguer gravity anomaly map of the Nevada Test Site and vicinity, Nevada: U.S. Geological Survey Open-File Report 87-506, scale 1:100,000.
112. Healy, J.H., Hickman, S.H., Zoback, M.D., and Ellis, W.L., 1984, Report on televiewer log and stress measurements in core hole USW-G1, Nevada Test Site, December 13-22, 1981: U.S. Geological Survey Open-File Report 84-15, 49 p.
113. Hildenbrand, T.G., Rogers, A.M., Oliver, H.W., Harmsen, S.C., Nakata, J.K., Aitken, D.S., Harris, R.N., and Carr, M.D., 1988, Regional geologic and geophysical maps of the southern Great Basin, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 3-22.
114. Hillhouse, J.W., 1987, Late Tertiary and Quaternary geology of the Tecopa Basin, southeastern California: U.S. Geological Survey Miscellaneous Investigations Series Map I-1728, scale 1:48,000.
115. Hodson, J.N., and Hoover, D.L., 1978, Geology and lithologic log for drill hole UE17a, Nevada Test Site: U.S. Geological Survey report USGS-1543-1, 17 p.
116. Hodson, J.N., and Hoover, D.L., 1979, Geology of the UE17e drill hole, Area 17, Nevada Test Site: U.S. Geological Survey report USGS-1543-2, 36 p.
117. Hoffman, L.R., and Mooney, W.D., 1983, A seismic study of Yucca Mountain and vicinity, southern Nevada: Data report and preliminary results: U.S. Geological Survey Open-File Report 83-588, 50 p.
118. Hofland, G.S., and Barton, C.C., 1990, FREQFIT--A computer program which performs numerical regression and statistical chi-squared goodness of fit analysis: U.S. Geological Survey Open-File Report 89-139, 62 p.
119. Hoover, D.B., Chornack, M.P., and Broker, M.M., 1982, E-field ratio telluric traverses near Fortymile Wash, Nevada Test Site, Nevada: U.S. Geological Survey Open-File Report 82-1042, 14 p.
120. Hoover, D.B., Chornack, M., Nervick, K., and Broker, M., 1982, Electrical studies at the proposed Wahmonie and Calico Hills nuclear waste sites, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 82-466, 91 p.
121. Hoover, D.B., Hanna, W.F., Anderson, L.A., Flanigan, V.J., and Pankratz, L.W., 1982, Geophysical studies of the Syncline Ridge area Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 82-145, 68 p.
122. Hoover, D.L., 1989, Preliminary description of Quaternary and late Pliocene surficial deposits at Yucca Mountain and vicinity, Nye County, Nevada: U.S. Geological Survey Open-File Report 89-359, 45 p.
123. Hoover, D.L., Eckel, E.B., and Ohl, J.P., 1978, Potential sites for a Spent Unreprocessed Fuel Facility (SURFF), southwestern part of the Nevada Test Site: U.S. Geological Survey Open-File Report 78-269, 18 p.

124. Hoover, D.L., and Morrison, J.N., 1980, Geology of the Syncline Ridge area related to nuclear waste disposal, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 80-942, 70 p.
125. Hoover, D.L., Swadley, W C, and Gordon, A.C., 1981, Correlation characteristics of surficial deposits with a description of surficial stratigraphy in the Nevada Test Site region: U.S. Geological Survey Open-File Report 81-512, 27 p.
126. Hoxie, D.T., 1989, A conceptual model for the unsaturated-zone hydrogeologic system, Yucca Mountain, Nevada: Radioactive Waste Management and the Nuclear Fuel Cycle, v. 13, p. 73-75.
127. Huber, N.K., 1988, Late Cenozoic evolution of the upper Amargosa River drainage system, southwestern Great Basin, Nevada and California: U.S. Geological Survey Open-File Report 87-617, 26 p.
128. Iman, R.L., Stephens, H.P., Davenport, J.M., Waddell, R.K., and Leap, D.I., 1980, Sensitivity study on the parameters of the regional hydrology model for the Nevada Nuclear Waste Storage Investigations, *in* Proceedings of the 1979 DOE Statistical Symposium: Oak Ridge National Laboratory Report CONF-791016, p. 44-61.
129. Jansma, P.E., Snyder, D.B., and Ponce, D.A., 1982, Principal facts of gravity stations with gravity and magnetic profiles from the southwest Nevada Test Site, Nye County, Nevada, as of January 1982: U.S. Geological Survey Open-File Report 82-1041, 43 p.
130. Jones, B.F., 1982, Mineralogy of fine grained alluvium from borehole U11g, Expl. 1, northern Frenchman Flat area, Nevada Test Site: U.S. Geological Survey Open-File Report 82-765, 10 p.
131. Kane, M.F., and Bracken, R.E., 1983, Aeromagnetic map of Yucca Mountain and surrounding regions, southwest Nevada: U.S. Geological Survey Open-File Report 83-616, 19 p.
132. Kane, M.F., Webring, M.W., and Bhattacharyya, B.K., 1981, A preliminary analysis of gravity and aeromagnetic surveys of the Timber Mountain area, southern Nevada: U.S. Geological Survey Open-File Report 81-189, 40 p.
133. Kauahikaua, James, 1981, Interpretation of time-domain electromagnetic soundings in the Calico Hills area, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 81-988, 13 p. plus appendix.
134. King, K.W., 1982, A study of surface and subsurface ground motions at Calico Hills, Nevada Test Site: U.S. Geological Survey Open-File Report 82-1044, 19 p.
135. Kirchoff-Stein, K.S., Ponce, D.A., and Chuchel, B.A., 1990, Preliminary aeromagnetic map of the Nevada Test Site and vicinity, Nevada: U.S. Geological Survey Open-File Report 89-446, scale 1:100,000.
136. Kume, Jack, and Hammermeister, D.P., 1990, Geohydrologic data from test hole USW UZ-7, Yucca Mountain area, Nye County, Nevada: U.S. Geological Survey Open-File Report 88-465, 37 p.

137. Kwicklis, E.M., 1990, Potential mechanisms for fracture flow in the unsaturated zone at Yucca Mountain; effects of air entrapment within matrix blocks: Topical Meeting on Nuclear Waste Isolation in the Unsaturated Zone, Focus '89, Proceedings, p. 398-399.
138. Lahoud, R.G., Lobmeyer, D.H., and Whitfield, M.S., Jr., 1984, Geohydrology of volcanic tuff penetrated by test well UE-25b#1, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 84-4253, 44 p.
139. Langenheim, V.E., Carle, S.F., Ponce, D.A., and Phillips, J.D., in press, Revision of an aeromagnetic survey of the Lathrop Wells area, Nevada: U.S. Geological Survey Open-File Report 91-46, scale 1:62,500.
140. Leap, D.I., 1982, Hydrology, *in* U.S. Geological Survey Research in radioactive waste disposal--fiscal year 1979: U.S. Geological Survey Circular 847, p. 10-11.
141. Lobmeyer, D.H., 1986, Geohydrology of rocks penetrated by test well USW-H4, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 86-4015, 38 p.
142. Lobmeyer, D.H., Whitfield, M.S., Jr., Lahoud, R.R., and Bruckheimer, Laura, 1983, Geohydrologic data for test well UE-25b-1H, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 83-855, 48 p.
143. Maldonado, Florian, 1981, Geology of the Twinridge pluton area, Nevada Test Site, Nevada: U.S. Geological Survey Open-File Report 81-156, 13 p.
144. Maldonado, Florian, 1984, Bedrock geologic map of the Lone Mountain Pluton, Esmeralda County, Nevada: U.S. Geological Survey Miscellaneous Investigations Map I-1533, scale 1:24,000.
145. Maldonado, Florian, 1985, Geologic map of the Jackass Flats area, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Map I-1519, scale 1:48,000.
146. Maldonado, Florian, 1989, Detachment faulting and mineralization at Bullfrog Mountain, Bullfrog Hills area, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 16-17.
147. Maldonado, Florian, 1990, Structural geology of the upper plate of the Bullfrog Hills detachment fault system, southern Nevada: Geological Society of America Bulletin, v. 102, p. 992-1006.
148. Maldonado, Florian, 1990, Geologic map of the northwest quarter of the Bullfrog 15-minute quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Series Map I-1985, scale 1:24,000.
149. Maldonado, Florian, and Hausback, B.P., 1990, Geologic map of the northeast quarter of the Bullfrog 15-minute quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Map I-2049, scale 1:24,000.

150. Maldonado, Florian, and Koether, S.L., 1983, Stratigraphy, structure, and some petrographic features of Tertiary volcanic rocks at the USW G-2 drill hole, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 83-732, 83 p.
151. Maldonado, Florian, Muller, D.C., and Morrison, J.N., 1979, Preliminary geologic and geophysical data of the UE25a-3 exploratory drill hole, Nevada Test Site, Nevada: U.S. Geological Survey report USGS-1543-6, 47 p.
152. Marshall, B.D., Peterman, Z.E., Futa, K., Stuckless, J.S., Mahan, S.A., Downey, J.S., and Gutentag, E.D., 1990, Origin of carbonate deposits in the vicinity of Yucca Mountain, Nevada: Preliminary results of strontium-isotope analyses, *in* High Level Radioactive Waste Management, International Topical Meeting Proceedings: American Nuclear Society and American Society of Civil Engineers, v. 2, p. 921-923.
153. Mayer, Larry, McFadden, L.D., and Harden, J.W., 1988, Distribution of calcium carbonate in desert soils: A model: *Geology*, v. 16, p. 303-306.
154. McGovern, T.F., and Turner, D.W., 1983, An evaluation of seismic reflection studies in the Yucca Mountain area, Nevada Test Site, with an Introduction by L.W. Pankratz and H.D. Ackermann: U.S. Geological Survey Open-File Report 83-912, 58 p.
155. McKeown, M.H., Fairer, G.M., and Beason, S.C., 1989, Prototype underground geologic mapping at G-tunnel, Nevada Test Site, Nevada, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 13-14.
156. Meremonte, M.E., and Rogers, A.M., 1987, Historical catalog of southern Great Basin earthquakes 1868-1978: U.S. Geological Survey Open-File Report 87-80, 203 p.
157. Milne, W.K., Benson, L.V., and McKinley, P.W., 1987, Isotope content and temperature of precipitation in southern Nevada--August 1983-March 1986: U.S. Geological Survey Open-File Report 87-463, 37 p.
158. Monfort, M.E., and Evans, J.R., 1982, Three-dimensional modeling of the Nevada Test Site and vicinity from teleseismic P-wave residuals: U.S. Geological Survey Open-File Report 82-409, 66 p.
159. Monsen, S.A., Carr, M.D., Reheis, M.C., and Orkild, P.P., 1990, Geologic map of Bare Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 90-25, scale 1:24,000.
160. Montazer, Parviz, 1987, Monitoring hydrologic conditions in the vadose zone in fractured rocks, Yucca Mountain, Nevada: *Geophysical Monograph* 42, p. 31-42.
161. Montazer, Parviz, Weeks, E.P., Thamir, Falah, Yard, S.N., and Hofrichter, P.B., 1986, Monitoring the vadose zone in fractured tuff, Yucca Mountain, Nevada, *in* Proceedings, National Water Well Association Conference on Characterization and Monitoring of the Vadose (Unsaturated) Zone, Denver, Colorado, November 19-21, 1985, p. 439-469.

162. Montazer, Parviz, and Wilson, W.E., 1984, Conceptual hydrologic model of flow in the unsaturated zone, Yucca Mountain, Nevada: U.S. Geological Survey Water-Resources Investigations Report 84-4345, 55 p.
163. Montazer, Parviz, and Wilson, W.E., 1986, Hydrogeology of the unsaturated zone, Yucca Mountain, Nevada, *in* Proceedings, National Water Well Association Conference on Characterization and Monitoring of the Vadose (Unsaturated) Zone, Denver, Colorado, November 19-21, 1985, p. 396-412.
164. Moore, D.E., Morrow, C.A., and Byerlee, J.D., 1984, Permeability and fluid chemistry studies of the Topopah Spring Member of the Paintbrush Tuff, Nevada Test Site: Part II: U.S. Geological Survey Open-File Report 84-848, 31 p.
165. Moore, D.E., Morrow, C.A., Byerlee, J.D., 1984, Changes in permeability and fluid chemistry of the Topopah Spring Member of the Paintbrush Tuff (Nevada Test Site) when held in a temperature gradient: Summary of results: U.S. Geological Survey Open-File Report 84-273, 33 p.
166. Morrow, C., and Byerlee, J., 1984, Frictional sliding and fracture behavior of some Nevada Test Site tuffs, *in* Dowding, C., and Singh, M. eds., Rock Mechanics in Productivity and Protection: 25th Symposium on Rock Mechanics, Evanston, Ill., p. 467-474.
167. Morrow, C., Moore, D., and Byerlee, J., 1983, Permeability and pore-fluid chemistry of the Bullfrog Tuff in a temperature gradient, *in* Mathewson, C., ed., Rock Mechanics: Theory Experiment and Practice: Proceedings of the 24th U.S. Symposium on Rock Mechanics, College Station, Tex., p. 819-827.
168. Morrow, C.A., Moore, D.E., and Byerlee, J.D., 1984, Permeability and pore-fluid chemistry of the Topopah Spring Member of the Paintbrush Tuff, Nevada Test Site, in a temperature gradient--Application to nuclear waste storage: Scientific Basis for Nuclear Waste Management VII, Materials Research Society Symposia Proceedings, v. 26, p. 883-890.
169. Mower, T.E., Higgins, J.D., and Yang, I.C., 1990, Triaxial- and uniaxial-compression testing methods developed for extraction of pore water from unsaturated tuffs, Yucca Mountain, Nevada: Topical Meeting on Nuclear Waste Isolation in the Unsaturated Zone, Focus '89, Proceedings, p. 426-433.
170. Muhs, D.R., Whitney, J.W., Shroba, R.R., Taylor, E.M., and Bush, C.A., 1990, Uranium-series dating of secondary carbonates near Yucca Mountain, Nevada: Applications to tectonic, paleoclimatic, and paleohydrologic problems, *in* High Level Radioactive Waste Management, International Topical Meeting, Proceedings: American Nuclear Society and American Society of Civil Engineers, v. 2, p. 924-929.
171. Muller, D.C., 1985, Computer method to detect and correct cycle skipping on sonic logs, *in* Twenty-sixth Annual Logging Symposium, Transactions: Society of Professional Well Log Analysts, v. I, paper R, p. 1-18.
172. Muller, D.C., and Kibler, J.E., 1983, Commercial geophysical well logs from the USW-G1 drill hole, Nevada Test Site, Nevada: U.S. Geological Survey Open-File Report 83-321, 7 p.

173. Muller, D.C., and Kibler, J.E., 1984, Preliminary analysis of geophysical logs from drill hole UE-25p#1, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 84-649, 14 p.
174. Muller, D.C., and Kibler, J.E., 1986, Preliminary analysis of geophysical logs from the WT series of drill holes, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 86-46, 30 p.
175. Murphy, J.M., 1989, USGS FM Casette seismic-refraction recording system: U.S. Geological Survey Open-File Report 88-570, 43 p.
176. Naeser, C.W., and Maldonado, Florian, 1981, Fission-track dating of the Climax and Gold Meadows stocks, Nye County, Nevada, *in* short Contributions to Geochronology: U.S. Geological Survey Professional Paper 1199-E, p. 45-47 (supersedes Open-File Report 78-419).
177. Nelson, P.H., Muller, D.C., Schimschal, Ulrich, and Kibler, J.E., in press, Summary of geophysical logs and core measurements from forty boreholes at Yucca Mountain, Nevada: U.S. Geological Survey Geophysical Investigations Map GP-1001.
178. Oatfield, W.J., and Czarnecki, J.B., 1989, Hydrogeologic inferences from drillers logs and from gravity and resistivity surveys in the Amargosa Desert, southern Nevada: U.S. Geological Survey Open-File Report 89-234, 29 p.
179. Page, W.R., 1990, Compilation of modal analyses of volcanic rocks from the Nevada Test Site area, Nye County, Nevada: U.S. Geological Survey Open-File Report 90-87, 179 p.
180. Palaz, Ibrahim, 1986, Application of geophysical logs to estimate moisture-content profiles in unsaturated tuffs, Yucca Mountain, Nevada, *in* Proceedings, National Water Well Association Conference on Characterization and Monitoring of the Vadose (Unsaturated) Zone, Denver, Colorado, November 19-21, 1985, p. 424-438.
181. Pankratz, L.W., 1982, Reconnaissance seismic refraction studies at Calico Hills, Wahmonie, and Yucca Mountain, southwest Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 82-478, 25 p.
182. Perkins, D.M., Thenhaus, P.C., Hanson, S.L., and Algermissen, S.T., 1987, A reconnaissance assessment of probabilistic earthquake accelerations at the Nevada Test Site: U.S. Geological Survey Open-File Report 87-199, 28 p.
183. Peter, K.D., Kolm, K.E., Downey, J.S., and Nichols, T.C., Jr., 1987, Lineaments--Significance, criteria for determination, and varied effects on ground-water systems--a case history in the use of remote sensing: American Society of Testing Matrials Special Publication 967, p. 46-68.
184. Peterman, Z.E., Spengler, R.W., Futa, Kiyoto, Marshall, B.D., and Mahan, S.A., 1991, Assessing the natural performance of felsic tuffs using the Rb-Sr and Sm-Nd systems--A study of the altered zone in the Topopah Spring Member, Paintbrush Tuff, Yucca Mountain, Nevada, *in* Abrajano, T.A., Jr., and Johnson, L.H., eds., Scientific Basis for Nuclear Waste Management XIV, Materials Research Society Symposium Proceedings, v. 212, p. 687-694.

185. Ponce, D.A., 1981, Preliminary gravity investigations of the Wahmonie site, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 81-522, 64 p.
186. Ponce, D.A., 1984, Gravity and magnetic evidence for a granitic intrusion near Wahmonie site, Nevada Test Site, Nevada: *Journal of Geophysical Research*, v. 89, no. B11, p. 9401-9413.
187. Ponce, D.A., and Hanna, W.F., 1982, Preliminary appraisal of gravity and magnetic data at Syncline Ridge, western Yucca Flat, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 82-931, 19 p.
188. Ponce, D.A., Harris, R.N., and Oliver, H.W., 1990, Isostatic gravity map of the Nevada Test Site and vicinity: U.S. Geological Survey Open-File Report 88-664, scale 1:100,000.
189. Ponce, D.A., and Oliver, H.W., 1981, Charleston Peak gravity calibration loop, Nevada: U.S. Geological Survey Open-File Report 81-985, 20 p.
190. Ponce, D.A., Wu, S.S.C., and Spielman, J.B., 1985, Comparison of survey and photogrammetry methods to position gravity data, Yucca Mountain, Nevada: U.S. Geological Survey Open-File Report 85-36, 11 p.
191. Reheis, M.C., 1988, Preliminary study of Quaternary faulting on the east side of Bare Mountain, Nye County, Nevada, *in* Carr, M.D., and Yount, J.C., eds., *Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada*: U.S. Geological Survey Bulletin 1790, p. 103-112 (supersedes Open-File Report 86-576).
192. Reheis, M.C., in press, Aerial photographic interpretation of lineaments and faults in Late Cenozoic deposits in the eastern parts of the Saline Valley 1:100,000 quadrangle, Nevada and California, and the Darwin Hills 1:100,000 quadrangle, California: U.S. Geological Survey Open-File Report 90-500, scale 1:100,000.
193. Reheis, M.C., Harden, J.W., McFadden, L.D., and Shroba, R.R., 1989, Variation in rates of development and description of Late Quaternary soils, Silver Lake Playa, California: *Journal of Soil Science*, v. 53, no. 4, p. 1127-1140.
194. Reheis, M.C., and Noller, J.S., 1989, New perspective on Quaternary faulting in the southern Walker Lane, Nevada: Nevada Bureau of Mines and Geology Open-File Report 89-1, p. 57-61.
195. Reheis, M.C., and Noller, J.S., in press, Aerial photographic interpretation of lineaments and faults in Late Cenozoic deposits in the eastern part of the Benton Range 1:100,000 quadrangle and the Goldfield, Last Chance Range, Beatty, and Death Valley Junction 1:100,000 quadrangles, Nevada and California: U.S. Geological Survey Open-File Report 90-41, scale 1:100,000.
196. Robinson, G.D., 1985, Structure of pre-Cenozoic rocks in the vicinity of Yucca Mountain, Nye County, Nevada--A potential nuclear-waste disposal site: U.S. Geological Survey Bulletin 1647, 22 p.

197. Robison, J.H., 1984, Ground-water level data and preliminary potentiometric-surface maps, Yucca Mountain and vicinity, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 84-4197, 8 p.
198. Robison, J.H., Stephens, D.M., Luckey, R.R., and Baldwin, D.A., 1989, Water levels in periodically measured wells in the Yucca Mountain area, Nevada, 1981-87: U.S. Geological Survey Open-File Report 88-468, 132 p.
199. Rodriguez, E.A., and Yount, J.C., 1988, Relation between P-wave velocity and stratigraphy of late Cenozoic deposits of southern Nevada, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 139-146.
200. Rogers, A.M., Harmsen, S.C., and Carr, W.J., 1981, Southern Great Basin seismological data report for 1980 and preliminary data analysis: U.S. Geological Survey Open-File Report 81-1086, 148 p.
201. Rogers, A.M., Harmsen, S.C., Carr, W.J., and Spence, W.J., 1983, Southern Great Basin seismological data report for 1981 and preliminary data analysis: U.S. Geological Survey Open-File Report 83-669, 240 p.
202. Rogers, A.M., Harmsen, S.C., Herrmann, R.B., and Meremonte, M.E., 1987, A study of ground motion attenuation in the southern Great Basin, California-Nevada using several techniques for estimates of Q_s , $\log A_0$, and Coda Q: *Journal of Geophysical Research*, v. 92, no. 85, p. 3527-3540.
203. Rogers, A.M., Harmsen, S.C., and Meremonte, M.E., 1988, Evaluation of the seismicity of the southern Great Basin and its relationship to the tectonic framework of the region: U.S. Geological Survey Open-File Report 87-408, 196 p.
204. Rosenbaum, J.G., 1986, Paleomagnetic directional dispersion produced by plastic deformation in a thick Miocene welded tuff, southern Nevada: Implications for welding temperatures: *Journal of Geophysical Research*, v. 91, no. B12, p. 12,817-12,834.
205. Rosenbaum, J.G., Hudson, M.R., and Scott, R.B., 1991, Paleomagnetic constraints on the geometry and timing of deformation at Yucca Mountain, Nevada: *Journal of Geophysical Research*, v. 96, no. B2, p. 1963-1979.
206. Rosenbaum, J.G., and Rivers, W.C., 1985, Paleomagnetic orientation of core from drill hole USW GU-3, Yucca Mountain, Nevada: Tiva Canyon Member of the Paintbrush Tuff: U.S. Geological Survey Open-File Report 85-48, 116 p.
207. Rosenbaum, J.G., and Snyder, D.B., 1985, Preliminary interpretation of paleomagnetic and magnetic property data from drill holes USW G-1, G-2, GU-3, G-3, and VH-1 and surface localities in the vicinity of Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 85-49, 73 p.
208. Rosholt, J.N., Bush, C.A., Carr, W.J., Hoover, D.L., Swadley, W C, and Dooley, J.R., Jr., 1985, Uranium-trend dating of Quaternary deposits in the Nevada Test Site area, Nevada and California: U.S. Geological Survey Open-File Report 85-540, 72 p.

209. Rosholt, J.N., Swadley, W C, and Bush, C.A. 1988, Uranium-trend dating of fluvial and fan deposits in the Beatty area, Nevada, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, Nevada: U.S. Geological Survey Bulletin 1790, p. 129-138.
210. Rousseau, J.P., 1989, Site vertical boreholes--Unsaturated zone percolation, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 31-32.
211. Rulon, J., Bodvarsson, G.S., and Montazer, P., 1986, Preliminary numerical simulations of groundwater flow in the unsaturated zone, Yucca Mountain, Nevada: Lawrence Berkeley Laboratory Report LBL-20553, 91 p.
212. Rush, F.E., Thordarson, William, and Bruckheimer, Laura, 1983, Geohydrologic and drill-hole data for test well USW-H1, adjacent to Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 83-141, 38 p.
213. Rush, F.E., Thordarson, William, and Pyles, D.G., 1984, Results of hydraulic tests in well USW H-1, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 84-4032, 56 p.
214. Saltus, R.W., 1988, Bouguer gravity anomaly map of Nevada: Nevada Bureau of Mines and Geology Map 94A, scale 1:750,000.
215. Saltus, R.W., 1988, Gravity data for the state of Nevada on magnetic tape: U.S. Geological Survey Open-File Report 88-433, 20 p. + magnetic tape (available *only* from USGS EROS Data Center, Sioux Falls, S.D. 57198).
216. Saltus, R.W., 1988, Regional, residual, and derivative gravity maps of Nevada: Nevada Bureau of Mines and Geology Map 94B, scale 1:750,000.
217. Saltus, R.W., and Ponce, D.A. 1988, Aeromagnetic map of Nevada, Las Vegas sheet: Nevada Bureau of Mines and Geology Map 95, scale 1:250,000.
218. Saltus, R.W., and Snyder, D.B., 1986, Aeromagnetic map of Nevada, Caliente sheet: Nevada Bureau of Mines and Geology Map 89, scale 1:250,000.
219. Sass, J.H., and Lachenbruch, A.H., 1982, Preliminary interpretation of thermal data from the Nevada Test Site: U.S. Geological Survey Open-File Report 82-973, 30 p.
220. Sass, J.H., Lachenbruch, A.H., and Mase, C.W., 1980, Analysis of thermal data from drill holes UE25a-3 and UE25a-1, Calico Hills and Yucca Mountain, Nevada Test Site: U.S. Geological Survey Open-File Report 80-826, 25 p.
221. Sass, J.H., Lachenbruch, A.H., Dudley, W.W., Jr., Priest, S.S., and Munroe, R.J., 1988, Temperature, thermal conductivity, and heat flow near Yucca Mountain, Nevada: Some tectonic and hydrologic implications: U.S. Geological Survey Open-File Report 87-649, 118 p.
222. Schilling, S.P., in press, GEOTRANS: An interface program from GEOPROGRAM to a geographic information system: U.S. Geological Survey Open-File Report 90-615.

- 223. Schilling, S.P., and Thompson, R.A., 1989, Color palette: Plotting guide for use with GSDMAP and GSDRAW mapping software: U.S. Geological Survey Open-File Report 88-553, 11 p.
- 224. Scott, R.B., 1989, Isostatic uplift, crustal attenuation, and the evolution of an extensional detachment system in southwestern Nevada: Nevada Bureau of Mines and Geology Open-File Report 89-1, p. 19-26.
- 225. Scott, R.B., 1990, Tectonic setting of Yucca Mountain, southwest Nevada, *in* Wernicke, B.P., ed., Basin and Range extensional tectonics near the latitude of Las Vegas, Nevada: Geological Society of America Memoir 176, p. 251-282.
- 226. Scott, R.B., Bath, G.D., Flanigan, V.J., Hoover, D.B., Rosenbaum, J.G., and Spengler, R.W., 1984, Geological and geophysical evidence of structures in northwest-trending washes, Yucca Mountain, southern Nevada, and their possible significance to a nuclear waste repository in the unsaturated zone: U.S. Geological Open-File Report 84-567, 23 p.
- 227. Scott, R.B., and Bonk, Jerry, 1984, Preliminary geologic map of Yucca Mountain, Nevada, with geologic sections: U.S. Geological Survey Open-File Report 84-494, scale 1:12,000.
- 228. Scott, R.B., and Castellanos, Mayra, 1984, Stratigraphic and structural relations of volcanic rocks in drill holes USW GU-3 and USW G-3, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 84-491, 121 p.
- 229. Scott, R.B., Spengler, R.W., Diehl, Sharon, Lappin, A.R., and Chornack, M.P., 1983, Geologic character of tuffs in the unsaturated zone at Yucca Mountain, southern Nevada, *in* The role of the unsaturated zone in radioactive and hazardous waste disposal: Ann Arbor Science, Butterworth Group, p. 289-335.
- 230. Senterfit, R.M., Hoover, D.B., and Chornack, M., 1982, Resistivity sounding investigations by the Schlumberger method in the Yucca Mountain/Jackass Flats area, Nevada Test Site, Nevada: U.S. Geological Survey Open-File Report 82-1043, 38 p.
- 231. Sheppard, R.A., Gude, A.J., 3rd, and Fitzpatrick, Joan, 1988, Distribution, characterization, and genesis of mordenite in Miocene silicic tuffs at Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Bulletin 1777, 22 p.
- 232. Simpson, H.E., Weir, J.W., Jr., and Woodward, L.A., 1979, Inventory of clay-rich bedrock and metamorphic derivatives in eastern Nevada, excluding the Nevada Test Site: U.S. Geological Survey Open-File Report 79-760, 147 p.
- 233. Smith, Christian, and Ross, H.P., 1982, Interpretation of resistivity and induced polarization profiles with severe topographic effects, Yucca Mountain area, Nevada Test Site, Nevada with an Introduction by D. B. Hoover: U. S. Geological Survey Open-File Report 82-182, 82 p.
- 234. Smith, Christian, Ross, H.P., and Edquist, Ronald, 1981, Interpreted resistivity/IP section line W1 Wahmonie area, Nevada Test Site, Nevada, with an Introduction by D. B. Hoover: U.S. Geological Survey Open-File Report 81-1350, 14 p.

235. Snyder, D.B., and Carr, W.J., 1982, Preliminary results of gravity investigations at Yucca Mountain and vicinity, southern Nye County, Nevada: U.S. Geological Survey Open-File Report 82-701, 36 p.
236. Snyder, D.B., and Carr, W.J., 1984, Interpretation of gravity data in a complex volcano-tectonic setting, southwestern Nevada: *Journal of Geophysical Research*, v. 89, no. B12, p. 10,193-10,206.
237. Snyder, D.B., and Oliver, H.W., 1981, Preliminary results of gravity investigations of the Calico Hills, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Open-File Report 81-101, 42 p.
238. Sowers, J.M., ed., 1988, Geomorphology and pedology of the Kyle Canyon alluvial fan, southern Nevada, *in* Weide, D.L., and Faber, M.L. eds., This extended land, geological journeys in the southern Basin and Range: Geological Society of America, Cordilleran Section, Field Trip Guidebook, p. 137-156.
239. Spaulding, W.G., 1985, Vegetation and climates of the last 45,000 years in the vicinity of the Nevada Test Site, south-central Nevada: U.S. Geological Survey Professional Paper 1329, 83 p. (supersedes Open-File Report 83-535).
240. Spaulding, W.G., Robinson, S.W., and Paillet, F.L., 1984, Preliminary assessment of climatic change during late Wisconsin time, southern Great Basin and vicinity, Arizona, California, and Nevada: U.S. Geological Survey Water-Resources Investigations Report 84-4328, 40 p.
241. Spengler, R.W., Byers, F.M., Jr., and Warner, J.B., 1981, Stratigraphy and structure of volcanic rocks in drill hole USW-G1, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 81-1349, 50 p.
242. Spengler, R.W., and Chornack, M.P., 1984, Stratigraphic and structural characteristics of volcanic rocks in core hole USW G-4, Yucca Mountain, Nye County, Nevada *with a section on* Geophysical logs by D.C. Muller and J.E. Kibler: U.S. Geological Survey Open-File Report 84-789, 77 p.
243. Spengler, R.W., and Fox, K.F., Jr., 1988, Stratigraphic and structural framework of Yucca Mountain, Nevada, *in* Transactions of the American Nuclear Society: American Nuclear Society, v. 56, p. 207-209.
244. Spengler, R.W., and Fox, K.F., Jr., 1989, Overview of stratigraphy, structure, and tectonics from the crest of Yucca Mountain, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 25-28.
245. Spengler, R.W., and Fox, K.F., Jr., 1990, Stratigraphic and structural framework of Yucca Mountain, Nevada: Radioactive Waste Management and the Nuclear Fuel Cycle, v. 13, p. 21-36.
246. Spengler, R.W., Maldonado, Florian, Weir, J.E., Jr., and Dixon, G.L., 1979, Inventory of granitic masses in the State of Nevada: U.S. Geological Survey Open-File Report 79-235, 264 p.

247. Spengler, R.W., Muller, D.C., and Livermore, R.B., 1979, Preliminary report on the geology of drill hole UE25a-1, Yucca Mountain, Nevada Test Site: U.S. Geological Survey Open-file report 79-1244, 43 p.
248. Spengler, R.W., and Page, W.R., 1989, Geologic features at Fran Ridge, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 23-24.
249. Spengler, R.W., and Rosenbaum, J.G., 1980, Preliminary interpretations of geologic results obtained from boreholes UE25a-4, -5, -6, and -7, Yucca Mountain, Nevada Test Site: U.S. Geological Survey Open-File Report 80-929, 33 p.
250. Spielman, J.B., and Ponce, D.A., 1984, HANDTC, a Fortran program to calculate inner-zone terrain corrections: U.S. Geological Survey Open-File Report 84-777, 20 p.
251. Squires, R.R., and Young, R.L., 1984, Flood potential of Fortymile Wash and its principal southwestern tributaries, Nevada Test Site, southern Nevada: U.S. Geological Survey Water-Resources Investigations Report 83-4001, 33 p.
252. Stock, J.M., and Healy, J.H., 1988, Stress field at Yucca Mountain, Nevada, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 87-94.
253. Stock, J.M., Healy, J.H., and Hickman, S.H., 1984, Report on televiwer log and stress measurements in core hole USW G-2, Nevada Test Site, October-November 1982: U.S. Geological Survey Open-File Report 84-172, 47 p.
254. Stock, J.M., Healy, J.H., Hickman, S.H., and Zoback, M.C., 1985, Hydraulic fracturing stress measurements at Yucca Mountain, Nevada, and relationship to the regional stress field: *Journal of Geophysical Research*, v. 90, no. B10, p. 8691-8706.
255. Stock, J.M., Healy, J.H., Svitek, J., and Mastin, L., 1986, Report on televiwer log and stress measurements in holes USW G-3 and UE-25p#1, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 86-369, 91 p.
256. Sutton, V.D., 1984, Data report for the 1983 seismic-refraction experiment at Yucca Mountain, Beatty and vicinity, southwestern Nevada: U.S. Geological Survey Open-File Report 84-661, 62 p.
257. Sutton, V.D., 1985, Data report for the 1985 seismic-refraction experiment at Yucca Mountain and vicinity, southwestern Nevada: U.S. Geological Survey Open-File Report 85-591, 96 p.
258. Swadley, W C, 1983, Surficial geology of the Lathrop Wells quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Map I-1361, scale 1:48,000.
259. Swadley, W C, 1989, Spring deposits of the northern Amargosa Desert, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 17-18.

- 260. Swadley, W C, and Carr, W.J., 1987, Geologic map of the Quaternary and Tertiary deposits of the Big Dune quadrangle, Nevada-California: U.S. Geological Survey Miscellaneous Investigations Series Map I-1767, scale 1:48,000.
- 261. Swadley, W C, and Hoover, D.L., 1983, Geology of faults exposed in trenches in Crater Flat, Nye County, Nevada: U.S. Geological Survey Open-File Report 83-608, 15 p.
- 262. Swadley, W C, and Hoover, D.L., 1989, Geologic map of the surficial deposits of the Topopah Spring quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Series Map I-2018, scale 1:24,000.
- 263. Swadley, W C, and Hoover, D.L., 1989, Geologic map of the surficial deposits of the Jackass Flats quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Series Map I-1994, scale 1:24,000.
- 264. Swadley, W C, Hoover, D.L., and Rosholt, J.N., 1984, Preliminary report on late Cenozoic stratigraphy and faulting in the vicinity of Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 84-788, 42 p.
- 265. Swadley, W C, and Huckins, H.E., 1989, Surficial geologic map of the Specter Range NW quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Series Map I-1884, scale 1:24,000.
- 266. Swadley, W C, and Huckins, H.E., 1990, Geologic map of the surficial deposits of the Skull Mountain quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Series Map I-1972, scale 1:24,000.
- 267. Swadley, W C, Huckins, H.E., and Taylor, E.M., 1986, Trench logs from the Beatty scarp, Nye County, Nevada: U.S. Geological Survey Map Series MF-1897.
- 268. Swadley, W C, and Parrish, L.D., 1988, Surficial geology of the Bare Mountain quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Series Map I-1826, scale 1:48,000.
- 269. Swadley, W C, Yount, J.C., and Harding, S.T., 1988, Reinterpretation of the Beatty scarp, Nye County, Nevada, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 113-120.
- 270. Swolfs, H.S., and Savage, W.Z., 1985, Topography, stresses, and stability at Yucca Mountain, Nevada, *in* Ashworth, Eileen, ed., Research & engineering applications in rock masses: Twenty-Sixth Symposium on Rock Mechanics, Rapid City, 1985, Proceedings, p. 1121-1129.
- 271. Swolfs, H.S., Savage, W.Z., and Ellis, W.L., 1988, An evaluation of the topographic modification of stresses at Yucca Mountain, Nevada, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 95-102.

272. Szabo, B.J., Carr, W.J., and Gottschall, W.C., 1981, Uranium-thorium dating of Quaternary carbonate accumulations in the Nevada Test Site region: U.S. Geological Survey Open-File Report 81-119, 35 p.
273. Szabo, B.J., and Kyser, T.K., 1985, Uranium, thorium isotopic analyses of uranium-series ages of calcite and opal, and stable isotopic compositions of calcite from drill cores UE-25a-1, USW G-2, and USW G-3/GU-3, Yucca Mountain, Nevada: U.S. Geological Survey Open-File Report 85-224, 25 p.
274. Szabo, B.J., and Kyser, T.K., 1990, Ages and stable-isotope compositions of secondary calcite and opal in drill cores from Tertiary volcanic rocks of the Yucca Mountain area, Nevada: Geological Society of America Bulletin, v. 102, p. 1714-1719.
275. Szabo, B.J., and O'Malley, P.A., 1985, Uranium-series dating of secondary carbonate and silica precipitates relating to fault movements in the Nevada Test Site region: U.S. Geological Survey Open-File Report 85-47, 12 p.
276. Tarr, A.C., and Rogers, A.M., 1986, Analysis of earthquake data recorded by digital field seismic systems, Jackass Flats, Nevada: U.S. Geological Survey Open-File Report 86-420, 67 p.
277. Taylor, E.M., 1988, Instructions for the soil development index template--Lotus 1-2-3: U.S. Geological Survey Open-File Report 88-233A, 23 p. 88-233B, floppy disk.
278. Taylor, E.M., 1989, Late Quaternary paleoclimate studies--geologic problems and questions: Nevada Bureau of Mines and Geology Open-File Report 89-1, p. 153-154.
279. Taylor, E.M., Stuckless, J.S., and Levy, S.S., 1989, Trench 14, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 34-36.
280. Thamir, Falah, and McBride, C.M., 1986, Measurements of matric and water potentials in unsaturated tuff at Yucca Mountain, Nevada, *in* Proceedings, National Water Well Association Conference on Characterization and Monitoring of the Vadose (Unsaturated) Zone, Denver, Colorado, November 19-21, 1985, p. 470-487.
281. Thenhaus, P.C., and Barnhard, T.P., 1989, Regional termination and segmentation of Quaternary fault belts in the Great Basin Nevada and Utah: Bulletin of the Seismological Society of America, v. 79, no. 5, p. 1426-1438.
282. Thordarson, William, 1983, Geohydrologic data and test results from well J-13, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 83-4171, 57 p.
283. Thordarson, William, and Howells, Lewis, 1986, Hydraulic tests and chemical quality of water from well USW VH-1, Crater Flat, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 86-4359, 20 p.
284. Thordarson, William, Rush, F.E., Spengler, R.W., Waddell, S.J., 1984, Geohydrologic and drill-hole data for test well USW H-3, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 84-149, 28 p.

285. Thordarson, William, Rush, F.E., and Waddell, S.J., 1984, Geohydrology of rocks penetrated by test well USW H-3, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 84-4272, 38 p.
286. Thorstenson, D.G., Weeks, E.P., Haas, Herbert, and Woodward, J.C., 1990, Physical and chemical characteristics of topographically affected airflow in an open borehole at Yucca Mountain, Nevada: Topical Meeting on Nuclear Waste Isolation in the Unsaturated Zone, Focus '89, Proceedings, p. 256-270.
287. Throckmorton, C.K., 1987, Photogeologic study of small-scale linear features near a potential nuclear-waste repository site at Yucca Mountain, southern Nye County, Nevada: U.S. Geological Survey Open-File Report 87-409, 54 p.
288. Trautz, R.C., 1989, Cross-hole pneumatic and hydraulic prototype test, *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 14.
289. Trautz, R.C., and Weeks, E.P., 1989, Gaseous phase flow and transport through Yucca Mountain *in* Geological Society of America 1989 Field Trip Guidebook, Field Trip No. 4: Missouri Department of Natural Resources Special Publication No. 5, p. 32.
290. U.S. Geological Survey, 1983, Aeromagnetic map of part of the Las Vegas 1° x 2° quadrangle, Nevada: U.S. Geological Survey Open-File Report 83-729, scale 1:250,000.
291. U.S. Geological Survey, 1984, A summary of geologic studies through January 1, 1983, of a potential high-level radioactive waste repository site at Yucca Mountain, southern Nye County, Nevada: U.S. Geological Survey Open-File Report 84-792, 103 p.
292. U.S. Geological Survey, 1984, Aeromagnetic map of the Mercury area, Nevada: U.S. Geological Survey Open-File Report 84-209, scale 1:62,500.
293. U.S. Geological Survey, 1984, Aeromagnetic map of the Yucca Mountain area, Nevada: U.S. Geological Survey Open-File Report 84-206, scale 1:62,500.
294. Waddell, R.K., 1982, Two-dimensional, steady-state model of ground-water flow, Nevada Test Site and vicinity, Nevada-California: U.S. Geological Survey Water Resources Investigations Report 82-4085, 72 p.
295. Waddell, R.K., 1985, Hydrologic and drill-hole data for test wells UE-29a#1 and UE-29a#2, Fortymile Canyon, Nevada Test Site: U.S. Geological Survey Open-File Report 84-142, 25 p.
296. Waddell, R.K., Robison, J.H., and Blankennagel, R.K., 1984, Hydrology of Yucca Mountain and vicinity, Nevada-California--Investigative results through mid-1983: U.S. Geological Survey Water-Resources Investigations Report 84-4267, 72 p.
297. Wagini, Alexander, 1985, An automatic program for the interpretation of two-dimensional gravity and magnetic anomalies: U.S. Geological Survey Open-File Report 85-377, 68 p.

298. Weeks, E.P., and Wilson, W.E., 1984, Preliminary evaluation of hydrologic properties of cores of unsaturated tuff, test well USW H-1, Yucca Mountain, Nevada: U.S. Geological Survey Water-Resources Investigations Report 84-4193, 30 p.
299. Weir, J.E., Jr., and Hodson, J.N., 1979, Geohydrology of hole UE17a, Syncline Ridge area, Nevada Test Site: U.S. Geological Survey report USGS-1543-4, 18 p.
300. Whelan, J.F., and Stuckless, J.S., 1990, Reconnaissance $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ data from trench 14, Busted Butte, and drill hole G-4, Yucca Mountain, Nevada Test Site, *in* High Level Radioactive Waste Management, International Topical Meeting Proceedings: American Nuclear Society and American Society of Civil Engineers, v. 2, p. 930-933.
301. Whitfield, M.S., 1986, Vacuum drilling of unsaturated tuffs at a potential radioactive waste repository, Yucca Mountain, Nevada, *in* Proceedings, National Water Well Association Conference on Characterization and Monitoring of the Vadose (Unsaturated) Zone, Denver, Colorado, November 19-21, 1985, p. 413-423.
302. Whitfield, M.S., Jr., Eshom, E.P., Thordarson, William, and Schaefer, D.H., 1985, Geohydrology of test well USW H-4, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 85-4030, 33 p.
303. Whitfield, M.S., Jr., Thordarson, William, and Eshom, E.P., 1984, Geohydrologic and drill-hole data for test well USW H-4, Yucca Mountain, Nye County, Nevada: U.S. Geological Survey Open-File Report 84-449, 39 p.
304. Wilson, W.E., 1982, Hydrology, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1980: U.S. Geological Survey Open-File Report 82-509, p. 15-17.
305. Wilson, W.E., 1983, Hydrology, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1981: U.S. Geological Survey Water-Resources Investigations Report 83-4105, p. 22-25.
306. Wilson, W.E., 1984, Nevada Test Site and vicinity; hydrology, *in* U.S. Geological Survey research in radioactive waste disposal--fiscal year 1982: U.S. Geological Survey Water-Resources Investigations Report 84-4205, p. 28-31.
307. Wilson, W.E., 1989, An overview of the geology and hydrology of the Yucca Mountain area, Nevada: Waste Management '89, Volume 1 High-Level Waste and General Interest, p. 523.
308. Winograd, I.J., 1981, Radioactive waste disposal in thick unsaturated zones: Science, v. 212, no. 4502, p. 1457-1464.
309. Winograd, I.J., and Doty, G.C., 1980, Paleohydrology of the southern Great Basin with special reference to water table fluctuations beneath the Nevada Test Site during the Late(?) Pleistocene: U.S. Geological Survey Open-File Report 80-569, 91 p.

310. Winograd, I.J., and Szabo, B.J., 1988, Water-table decline in the south-central Great Basin during the Quaternary: implications for toxic waste disposal, *in* Carr, M.D., and Yount, J.C., eds., Investigations of the geological and geophysical characterization of a potential nuclear waste disposal site at Yucca Mountain, southern Nevada: U.S. Geological Survey Bulletin 1790, p. 147-152.
311. Wu, S.S.C., 1985, Topographic maps of Yucca Mountain area, Nye County, Nevada: U.S. Geological Survey Open-File Report 85-620, scale 1:5,000.
312. Yang, I.C., 1987, Sampling and analysis of dissolved radon-222 in surface and ground water: Proceedings, National Water Well Association Meeting, Summerset, N.J., April 7-9, 1987, p. 193-203.
313. Yang, I.C., 1988, Radiocarbon dates V: Radiocarbon, American Journal of Science, v. 30, no. 1, p. 41-60.
314. Yang, I.C., 1989, Climatic changes inferred from analysis of lake-sediment cores, Walker Lake, Nevada: U.S. Geological Survey Water-Resources Investigations Report 89-4006, 15 p.
315. Yang, I.C., Haas, H.H., Weeks, E.P., and Thorstenson, D.C., 1986, Analysis of gaseous-phase stable and radioactive isotopes in the unsaturated zone, Yucca Mountain, Nevada, *in* Proceedings, National Water Well Association Conference on Characterization and Monitoring of the Vadose (Unsaturated) Zone, Denver, Colorado, November 19-21, 1985, p. 488-506.
316. Yang, I.C., Turner, A.K., Sayre, T.M., and Montazer, Parviz, 1989, Triaxial-compression extraction of pore water from unsaturated tuff, Yucca Mountain, Nevada: U.S. Geological Survey Water Resources Investigations Report 88-4189, 68 p.
317. Yount, J.C., and Quimby, M.F., 1990, Grain-size data from four cores from Walker Lake, Nevada: U.S. Geological Survey Open-File Report 88-436, 79 p.
318. Yount, J.C., Shroba, R.R., McMasters, C.R., Huckins, H.E., and Rodriguez, E.A., 1987, Trench logs from a strand of the Rock Valley fault system, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Miscellaneous Field Investigations Map MF-1824.
319. Zablocki, C.J., 1979, Some reconnaissance-type electrical surveys of Timber Mountain caldera, Nye County, Nevada: U.S. Geological Survey Open-File Report 79-1695, 23 p.
320. Zielinski, R.A., Bush, C.A., Spengler, R.W., and Szabo, B.J., 1986, Rock-water interaction in ash-flow tuffs (Yucca Mountain, Nevada U.S.A.)--The record from uranium studies: Uranium, v. 2, p. 361-386.
321. Zumberge, M.A., Harris, R.N., Oliver, H.W., Sasagawa, G.S., and Ponce, D.A., 1988, Preliminary results of absolute and high-precision gravity measurements at the Nevada Test Site and vicinity, Nevada: U.S. Geological Survey Open-File Report 88-242, 29 p.

ABSTRACTS

322. Anderson, B.C., Galloway, D.L., and Miller, G., 1985, Microcomputer applications in geophysical logging and ground-water monitoring [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 46, p. 911.
323. Anderson, L.A., 1982, Rock property analysis for core samples from Yucca Mountain boreholes, Nevada Test Site, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1111.
324. Anderson, L.A., and Muller, D.C., 1985, Rock property analysis of Yucca Mountain tuffs, Nevada, by laboratory and borehole methods [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 46, p. 883.
325. Anthony, J.W., 1987, Automatic stratigraphic correlation of borehole-geophysical data using a Fortran 77 computer program [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 44, p. 1291.
326. Attanayake, M.P., Bodvarsson, G.S., and Montazer, P., 1986, Numerical modelling of the unsaturated zone at Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 962.
327. Barton, C.C., 1984, Tectonic significance of fractures in welded tuff, Yucca Mountain, southwest Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 6, p. 438.
328. Barton, C.C., 1986, Fracture network flow [abs.], in Carter, L. M. H., ed., USGS Research on Energy Resources--1986, Program and Abstracts: U.S. Geological Survey Circular 974, p. 4-5.
329. Barton, C.C., Gott, C.B., and Montgomery, J.R., 1986, Fractal scaling of fracture and fault maps at Yucca Mountain, southern Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 870.
330. Barton, C.C., Howard, T.M., and Larson, Eric, 1984, Tubular structures on the faces of cooling joints: A new volcanic feature [abs.]: Eos, Transactions of the American Geophysical Union, v. 65, no. 45, p. 1148.
331. Barton, C.C., Larsen, Eric, and Baechle, P.E., 1985, Fractal geometry of two-dimensional planar sections through fracture networks at Yucca Mountain, southwestern Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 46, p. 1089.
332. Barton, C.C., Page, W.R., and Larsen, Eric, 1986, Pattern of development of fracture networks [abs.]: Geological Society of America Abstracts with Programs, v. 18, no. 6, p. 536.
333. Barton, C.C., Samuel, J.K., and Page, W.R., 1988, Fractal scaling of fracture networks, trace lengths, and apertures [abs.]: Geological Society of America Abstracts with Programs, v. 20, no. 7, p. A299.
334. Barton, C.C., Schutter, T.A., Page, W.R., and Samuel, J.K., 1987, Computer generation of synthetic fracture networks for hydrologic-flow modeling [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 44, p. 1295.

335. Bath, G.D., Dixon, G.L., and Rosenbaum, J.G., 1982, Relation of aeromagnetic anomalies to faulted volcanic terrains at the Nevada Test Site [abs.]: Geological Society of America Abstracts with Programs, v. 14, no. 6, p. 302.
336. Benson, L.V., Klieforth, H.E., and McKinley, P.W., 1984, Relationship between ^{18}O and ^2H concentrations of 30 precipitation events in southwest Nevada and synoptic weather patterns [abs.]: Eos, Transactions of the American Geophysical Union, v. 65, no. 45, p. 886.
337. Broxton, D.E., Byers, F.M., Warren, R.G., and Scott, R.B., 1985, Trends in phenocryst chemistry in the Timber Mountain-Oasis Valley volcanic field, southwest Nevada--Evidence for episodic injection of primitive magma into an evolving magma system [abs.]: Geological Society of America Abstracts with Programs, v. 17, no. 6, p. 345.
338. Broxton, D.E., Warren, R.G., Byers, F.M., Scott, R.B., and Farmer, G. L., 1986, Petrochemical trends in the Timber Mountain-Oasis Valley caldera complex, SW Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 1260.
339. Byers, F.M., Jr., and Dixon, G.L., 1980, Current geologic investigations in the southwest quadrant of the Nevada Test Site in support of the nuclear waste program [abs.], *in* Proceedings of the 1980 National Waste Terminal Storage Program Information Meeting: Office of Nuclear Waste Isolation Report ONWI-212 (addendum), p. 7-8.
340. Byers, F.M., Jr., Carr, W.J., Orkild, P.P., 1986, Calderas of southwestern Nevada--evolution of understanding, 1960-1986 [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 1260.
341. Byers, F.M., Jr., Carr, W.J., Orkild, P.P., Scott, R.B., and Warren, R. G., 1983, Volcano-tectonic relations and some petrologic features of the Crater Flat Tuff, southwestern Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 15, no. 5, p. 280.
342. Carr, M.D., and Yount, J.C., 1987, Geologic setting of Yucca Mountain, southern Great Basin, Nevada: A potential site for the disposal of high-level nuclear waste [abs.], *in* Modern mineral and metal technology: Pacific NW Metals and Minerals Conference, April 27-28, 1987, Abstracts, p. 12.
343. Carr, W.J., 1980, Tectonics of the southern Great Basin--Studies in support of Nevada Nuclear Waste Storage Investigations [abs.], *in* Proceedings of the 1980 National Terminal Storage Program Information Meeting: Office of Nuclear Waste Isolation Report ONWI-212 (addendum), p. 7.
344. Carr, W.J., 1982, Structural setting and rate of tectonic activity in the Yucca Mountain region, southwestern Great Basin, Nevada and California [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1099.
345. Carr, W.J., 1982, Structural setting and rate of tectonic activity in the Yucca Mountain region, southwestern Great Basin, Nevada and California [abs.], *in* Proceedings of the 1982 National Waste Terminal Storage Program Information Meeting: U.S. Department of Energy Report DOE/NWTS-30, p. 107-108.

346. Carr, W.J., 1984, Timing and style of tectonism and localization of volcanism in the Walker Lane belt of southwestern Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 6, p. 464.
347. Chang, P.S., 1989, Seismic-refraction study of crustal structure for southern Great Basin, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 70, no. 43, p. 1214.
348. Crowe, B.M., Vaniman, D., Carr, W.J., and Fleck, R.J., 1980, Geology and tectonic setting of a Neogene volcanic belt within the south-central Great Basin, Nevada and California [abs.]: Geological Society of America Abstracts with Programs, v. 12 no. 7, p. 409.
349. Czarnecki, J.B., 1984, Finite-element simulation of potential radionuclide migration from a potential nuclear-waste repository at the Nevada Test Site [abs.]: Eos, Transactions of the American Geophysical Union, v. 65, no. 16, p. 209.
350. Czarnecki, J.B., 1985, Parameter-estimation model of ground-water flow in the vicinity of Yucca Mountain, Nevada-California [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 18, p. 269.
351. Czarnecki, J.B., 1987, Preliminary simulation of effects of increased recharge on the ground-water flow system of Yucca Mountain and vicinity, Nevada-California [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 44, p. 1270.
352. Czarnecki, J.B., 1987, Prioritization and field verification of ground-water flow model variables [abs.]: Proceedings, American Geophysical Union "Hydrology Days", Fort Collins, Colorado, April 21-24, 1987.
353. Czarnecki, J.B., 1987, Should the Furnace Creek Ranch-Franklin Lake Playa ground-water subbasin simply be the Franklin Lake Playa ground-water subbasin? [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 44, p. 1292.
354. Czarnecki, J.B., 1988, Characterization of the subregional ground-water flow system of Yucca Mountain and vicinity, Nevada-California [abs.]: Transactions of the American Nuclear Society, v. 56, p. 211-212.
355. Czarnecki, J.B., 1989, Preliminary simulations related to a large horizontal hydraulic gradient at the north end of Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 70, no. 15, p. 321.
356. Czarnecki, J.B., Kroitoru, Levy, Rohen, Daniel, and Magaritz, Mordeckai, 1989, Hydrochemical stratification at Franklin Lake Playa, Inyo County, California [abs.]: Eos, Transactions of the American Geophysical Union, v. 70, no. 43, p. 1104.
357. Czarnecki, J.B., and Oatfield, W.J., 1986, Hydrochemistry of ground water at Franklin Lake playa, Inyo County, California [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 939.
358. Czarnecki, J.B., and Oatfield, W.J., 1987, Use of driller's logs and geophysical surveys to define the hydrogeologic framework of the Amargosa Desert, southern Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 16, p. 302.

359. Czarnecki, J.B., and Stannard, D.I., 1986, Evapotranspiration at Franklin Lake Playa, Inyo County, California [abs.]: *Eos, Transactions of the American Geophysical Union*, v. 67, no. 16, p. 277.
360. Czarnecki, J.B., and Talbot, Robert, 1988, Evapotranspiration estimated from areally distributed discharge from Longstreet, Rogers, and Fairbanks Springs, Ash Meadows, Nevada [abs.]: *Eos, Transactions of the American Geophysical Union*, v. 69, no. 44, p. 1206.
361. Czarnecki, J.B., and Wilson, W.E., 1989, Site characterization and conceptual models of subregional ground-water flow systems, Yucca Mountain and vicinity, Nevada-California [abs.]: *Waste Management '89*, v. 1, p. 473.
362. Dixon, G.L., Carr, W.J., and Twenhofel, W.S., 1980, Earth science investigations for nuclear waste disposal at the Nevada Test Site [abs.]: *Geological Society of America Abstracts with Programs*, v. 12, no. 7, p. 414.
363. Dixon, G.L., Wilson, W.E., Carr, W.J., Rush, F.E., and Waddell, R.K., 1981, Status of geologic investigations for nuclear waste disposal at the Nevada Test Site [abs.], *in* *Proceedings of the 1981 National Waste Terminal Storage Program Information Meeting*: U.S. Department of Energy Report DOE/NWTS-15, p. 26-27.
364. Downey, J.S., 1988, Paleohydrology and hazardous waste [abs.]: *Geological Society of America Abstracts with Programs*, v. 20, no. 2, p. 97.
365. Dudley, W.W., Jr., 1977, Suitability of Nevada Test Site for terminal storage of radioactive wastes [abs.]: *Geological Society of America Abstracts with Programs*, v. 9, no. 7, p. 957-958.
366. Dudley, W.W., Jr., and Erdahl, B.R., 1982, Site characterization for evaluation of potential nuclear-waste isolation at Yucca Mountain, Nevada [abs.], *in* *Proceedings of the 1982 National Waste Terminal Storage Program Information Meeting*: U.S. Department of Energy Report DOE/NWTS-30, p. 10-12.
367. Erickson, J.R., Galloway, D.L., and Karasaki, Kenzi, 1985, Interpretations of falling-head injection test data for fractured volcanic tuffs [abs.]: *Geological Society of America Abstracts with Programs* 1985, v. 17, no. 7, p. 574-575.
368. Erickson, J.R., and Waddell, R.K., 1985, Parameter-estimation technique for the analysis of single-well tracer tests [abs.]: *Eos, Transactions of the American Geophysical Union*, v. 66, no. 18, p. 269.
369. Evans, J.R., and Oliver, H.W., 1987, Comparison of Timber Mountain caldera complex, Nevada with Yellowstone: Speculations on mechanism [abs.]: *Abstract Volume, Hawaii Symposium on How Volcanoes Work*, Jan. 19-25, 1987, p. 67.
370. Fairer, G.M., Whitney, J.W., and Coe, Jeff, 1987, Neotectonic trench studies at Yucca Mountain, Nevada, using close-range photogrammetry [abs.]: *Eos, Transactions of the American Geophysical Union*, v. 68, no. 44, p. 1509.
371. Flint, A.L., and Childs, S.W., 1987, Use of the Priestly-Taylor equation to estimate evapotranspiration for soil-water limited conditions [abs.]: *1987 Annual Meeting American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America*, Atlanta, Georgia, November 29-December 4, 1987.

372. Flint, A.L., and Davies, W.J., 1988, Analysis of the measurement and models of net radiation in desert terrain [abs.]: American Society of Agronomy, 1988 annual meeting.
373. Flint, A.L., and Flint, L.E., 1990, Preliminary evaluation of the mechanisms of net infiltration at Yucca Mountain, Nevada [abs.]: American Institute of Hydrology 1990 Spring Meeting Program with Abstracts, p. 19.
374. Flint, A.L., and Istok, J.D., 1987, Design of measurement network to determine boundary conditions for ground-water modeling in unsaturated rock [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 16, p. 299.
375. Flint, L.E., and Flint, A.L., 1987, Estimation of cloudy-sky radiation using air temperature and modeled clear-sky radiation [abs.]: 1987 Annual Meeting American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, Atlanta, Georgia, November 29-December 4, 1987.
376. Fox, K.F., Jr., 1988, Quaternary tectonic setting of Yucca Mountain, Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 20, no. 3, p. 161.
377. Galloway, Devin, and Rojstaczar, Stuart, 1988, Inferences about formation elastic and fluid flow properties from the frequency response of water levels to atmospheric pressure and earth tides, Yucca Mountain, Nevada, U.S.A. [abs.]: Fourth Canadian/American Conference on Hydrogeology, Proceedings, Banff, Alberta, June 21-24, 1988, p. 80-81.
378. Galloway, Devin, and Sullivan, Matt, 1986, Estimates of confined and unconfined aquifer characteristics from ground-water level fluctuations induced by earth tides and barometric fluctuations, Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 942.
379. Getzen, R.T., and Slack, J.R., 1987, Data acquisition system for monitoring the unsaturated zone at Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 16, p. 327.
380. Gutentag, E.D., Forester, R.M., and Downey, J.S., 1989, Ostracodes as a source of quantitative paleohydrologic and paleohydroenvironmental information [abs.]: Eos, Transactions of the American Geophysical Union, v. 70, no. 43, p. 1100.
381. Harrington, C.D., and Whitney, J.W., 1988, Age discrimination of low relief geomorphic surfaces by varnish cation ratios [abs.]: Eos, Transactions of the American Geophysical Union, v. 69, no. 44, p. 1207.
382. Harris, R.N., Oliver, H.W., and Healey, D.L., 1986, Structural implications of an isostatic residual gravity map of the Nevada Test Site, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 1262.
383. Harrold, Philip, Barton, C.C., and Montazer, Parviz, 1985, Statistical analysis of fracture roughness profiles in volcanic tuffs, Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 46, p. 883.

384. Harrold, Philip, Kwicklis, E.M., and Trautz, R.C., 1988, A scaled approach for validating fracture-flow and tracer-transport models for the unsaturated zone at Yucca Mountain, Nevada [abs.]: International Conference and Workshop on the Validation of Flow and Transport Models for the Unsaturated Zone, May 23-26, 1988, p. 37.
385. Healy, J.H., Hickman, S.H., Zoback, M.D., and Ellis, W.L., 1982, Deep borehole stress measurements at the Nevada Test Site [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1099-1100.
386. Hevesi, J.A., Flint, A.L., and Istok, J.D., 1988, Precipitation estimation in mountainous terrain using multivariate geostatistical analysis [abs.]: American Society of Agronomy, 1988 annual meeting.
387. Hoover, D.L., 1980, Tectonic geomorphology of valley-edge elevations in the Great Basin [abs.]: Geological Society of America Abstracts with Programs, v. 12, no. 7, p. 450.
388. Hoover, D.L., Hay, R.L., and Hillhouse, J.W., 1982, Paleo-climates of the Amargosa Basin, Nevada-California [abs.]: Geological Society of America Abstracts with Programs, v. 14, no. 4, p. 173.
389. Hoxie, D.T., 1989, Assessments of hydrogeologic features within the unsaturated zone, Yucca Mountain, Nevada [abs.]: Waste Management 1989 Conference, Tuscon, Ariz., Feb. 26-Mar. 2, 1989, p. 475.
390. Hoxie, D.T., and Lewis, B.L., 1988, Conceptual model of flow and solute transport in the unsaturated zone beneath Yucca Mountain, Nevada [abs.]: Transactions of the American Nuclear Society, v. 56, p. 212.
391. Istok, J.D., and Flint, A.L., 1988, Three-D, multivariate geostatistical software package [abs.]: American Society of Agronomy, 1988 annual meeting.
392. Kane, M.F., Bath, G.D., Snyder, D.B., Rosenbaum, J.G., Oliver, H.W., Ponce, D.A., and Healey, D.L., 1982, Gravity and magnetic studies in the region of the Nevada Test Site [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1099.
393. Klavetter, E., Hoxie, D., Chestnut, D., Buscheck, T., and Birdsell, K., 1988, A suggested structure for model validation for the Nevada Nuclear Waste Storage Investigations Project [abs.]: New Mexico State University International Conference and Workshop on the Validation of Flow and Transport Models for the Unsaturated Zone, May 23-26, 1988, p. 52.
394. Klenke, J.M., Flint, A.L., and Nicholson, R.A., 1987, A collimated neutron probe for soil-moisture measurements [abs.]: Proceedings, International Conference on Measurement of Soil and Plant Water, Logan, Utah, July 7-10, v. 1, p. 21.
395. Kume, Jack, and Hammermeister, D.P., 1987, Geologic factors that affect physical and hydrologic properties of volcanic tuffs in the unsaturated zone, Yucca Mountain, Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 19, no. 7, p. 735.

396. Kume, Jack, and Rousseau, J.P., 1989, Characterization of water percolation in the tuffs in the unsaturated zone, Yucca Mountain, Nye County, Nevada [abs.]: University of North Dakota Holland Festschrift Symposium, Programs and Abstracts, p. 5-6.
397. Kwicklis, E.M., 1988, Numerical simulations to aid in the design and interpretation of percolation tests in the proposed exploratory shaft facility, Yucca Mountain, Nevada [abs.]: Proceedings, Workshop IV on Flow and Transport through Unsaturated Fractured Rock Related to High-Level Radioactive Waste Disposal, U.S. NRC/University of Arizona, Tucson, Ariz., Dec. 12-15, 1988, p. 54-56.
398. Kwicklis, E.M., and Healy, R.W., 1988, Evaluation of methods for calculating finite-difference intercell hydraulic conductivity in simulations of variably saturated water flow in fractured systems [abs.]: International Conference and Workshop on the Validation of Flow and Transport Models for the Unsaturated Zone, May 23-26, 1988, p. 55.
399. Langmuir, Donald, Lewis-Russ, Anne, and Yang, I.C., 1988, The preparation and characterization of unsaturated geological materials for study of their ion adsorption behavior: The example of anionic tracers in volcanic tuff [abs.]: International Conference and Workshop on the Validation of Flow and Transport Models for the Unsaturated Zone, May 23-26, 1988, p. 56-57.
400. Lewis-Russ, Anne, Langmuir, Donald, and Yang, I.C., 1989, Applicability of simple and complex models to tracer adsorption in water-rock systems [abs.]: Ground Water, v. 27, no. 5, p. 721.
401. Luckey, R.R., 1990, Water-level monitoring to characterize the ground water flow system at Yucca Mountain [abs.]: American Institute of Hydrology 1990 Spring Meeting Program with Abstracts, p. 22.
402. Maldonado, Florian, 1985, Late Tertiary detachment faults in the Bullfrog Hills, southwestern Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 17, no. 7, p. 651.
403. Maldonado, Florian, 1988, Geometry of normal faults in the upper plate of a detachment fault zone, Bullfrog Hills, southern Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 20, no. 3, p. 178.
404. Marvil, J.D., Flint, A.L., and Davies, W.J., 1987, Unsaturated zone instrumentation techniques for measuring infiltration and soil-water content or potential profiles [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 16, p. 327.
405. Marvil, J.D., Flint, A.L., and Davies, W.J., 1987, Tensiometer-transducer system: Calibration and testing [abs.]: Proceedings, International Conference on Measurement of Soil and Plant Water, Logan, Utah, July 7-10, 1987, v. 1, p. 151.
406. Monfort, M.E., and Evans, J.R., 1982, Teleseismic studies of the Earth's crust and upper mantle in southern Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1099.
407. Montazer, Parviz, 1986, Application of hydrologic techniques in characterization of unsaturated fractured rocks [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 961.

- 408. Montazer, Parviz, and Harrold, Philip, 1985, Theoretical calculation of hydraulic properties of unsaturated fractures from roughness profiles [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 46, p. 883.
- 409. Montazer, Parviz, and Wilson, W.E., 1985, Conceptual model of flow in unsaturated fractured tuffs [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 18, p. 275.
- 410. Mooney, W.D., Snyder, D.B., and Hoffman, L.R., 1982, Seismic refraction and gravity modeling of Yucca Mountain, Nevada Test Site [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1100.
- 411. Muller, D.C., 1982, Commercial borehole geophysical logs at Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1111.
- 412. Myers, W.B., 1987, Detachment of Tertiary strata from their Paleozoic floor near Mercury, Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 19, no. 7, p. 783.
- 413. Niemi, Auli, Bodvarsson, G.S., and Montazer, Parviz, 1987, Preliminary capillary hysteresis simulations in partially saturated fractured rocks [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 16, p. 314.
- 414. Noller, J.S., and Reheis, M.C., 1988, Quaternary faults in the Goldfield section of the Walker Lane belt, southern Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 20, no. 3, p. 218.
- 415. Oliver, H.W., Dixon, G.L., and Carr, W.J., 1982, Geophysical and geologic characterization of Yucca Mountain and vicinity, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1099.
- 416. Palaz, Ibrahim, and Montazer, Parviz, 1985, Role of geophysical well logs in studies of the unsaturated zone, Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 46, p. 883.
- 417. Reheis, M.C., 1988, Dust influx in southern Nevada and California [abs.]: Geological Society of America Abstracts with Programs, v. 20, no. 7, p. A207.
- 418. Reheis, M.C., 1989, Applications of the morphology and genesis of desert soils to Quaternary studies in the southwestern United States [abs.]: International Geological Congress, Washington, DC, July 1989, v. 2, p. 684.
- 419. Robison, J.H., and Rush, F.E., 1982, Hydrologic site characterization of Yucca Mountain, Nevada [abs.], *in* Proceedings of the 1982 National Waste Terminal Storage Program Information Meeting: U.S. Department of Energy Report DOE/NWTS-30, p. 106-107.
- 420. Rogers, A.M., Carr, W.J., and Harmsen, S.C., 1982, Relations between observed seismic activity and structure in the southern Great Basin of Nevada and California [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1033.

421. Rogers, A.M., and Harmsen, S.C., 1988, Characteristics of seismicity in the southern Great Basin of Nevada-California [abs.]: Geological Society of America Abstracts with Programs, v. 20, no. 3, p. 225.
422. Rogers, A.M., Herrmann, R.B., and Meremonte, M., 1984, Wave attenuation in the southern Great Basin, Nevada-California [abs.]: Seismological Society of America, Earthquake Notes, v. 55, no. 1, p. 24.
423. Rosenbaum, J.G., 1984, Evidence for a hematitic TCRM in a welded tuff, Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 65, no. 45, p. 683.
424. Rosenbaum, J.G., 1985, Inclination error produced by welding in a Miocene ash-flow tuff, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 18, p. 256.
425. Rosenbaum, J.G., and Schlinger, C.M., 1987, Magnetic property variations and the origin of paleomagnetic carriers in an ash-flow sheet at Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 44, p. 1250.
426. Rosenbaum, J.G., and Spengler, R.W., 1986, Variation of magnetic properties in thick sections of the Crater Flat Tuff, southern Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 924.
427. Rosholt, J.N., Bush, C.A., and Carr, W.J., 1984, Uranium-trend dating of Quaternary deposits in the Nevada Test Site region [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 6, p. 639.
428. Rousseau, Joseph, and Thordarson, William, 1990, Thermodynamic processes of liquid and vapor movement in the U12g-12 drift extension, G-tunnel, NTS [abs.]: American Institute of Hydrology 1990 Spring Meeting Program with Abstracts, p. 24.
429. Sass, J.H., and Lachenbruch, A.H., 1982, Hydrologic implications of preliminary heat-flow data from the Nevada Test Site [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1099.
430. Savard, C.S., 1989, Evidence for the boundary between the Oasis Valley and the Alkali Flat-Furnace Creek Ranch ground-water subbasins, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 70, no. 43, p. 1104.
431. Schlinger, C.M., Veblen, D.R., and Rosenbaum, J.G., 1987, Paleomagnetic carriers in an ash-flow sheet at Yucca Mountain, Nevada: TEM study of Fe-oxide microcrystals in vitric and devitrified samples [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 44, p. 1250.
432. Scott, R.B., 1984, Internal deformation of blocks bounded by Basin and Range style faults [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 6, p. 649.
433. Scott, R.B., 1986, Extensional tectonics at Yucca Mountain, southern Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 18, no. 5, p. 411.

434. Scott, R.B., 1986, Geologic framework of Yucca Mountain, Nevada [abs.]: American Chemical Society, Abstracts of Papers, 192nd ACS National Meeting, Anaheim, California, Geochemical Technical Session No. 82.
435. Scott, R.B., 1988, Tectonic setting of Yucca Mountain, southwest Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 20, no.3, p. 229.
436. Scott, R.B., Broxton, D.E., and Budahn, J.R., 1986, Rare-earth element evidence for changes in chemical evolution of silicic magmas, southwest Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 1261.
437. Scott, R.B., Byers, F.M., and Warren, R.G., 1984, Evolution of magma below clustered calderas, southwest Nevada volcanic field [abs.]: Eos, Transactions of the American Geophysical Union, v. 65, p. 1126-1127.
438. Scott, R.B., and Hofland, G.S., 1987, Fault-slip paleostress analysis of Yucca Mountain, SW Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 1461.
439. Scott, R.B., and Rosenbaum, J.G., 1986, Structural and paleomagnetic evidence of rotation about a vertical axis during extension at Yucca Mountain, southern Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 16, p. 358.
440. Scott, R.B., and Spengler, R.W., 1982, Structural framework of a potential nuclear waste repository, Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, no. 45, p. 1099.
441. Scott, R.B., Spengler, R.W., Lappin, A.R., Chornack, M.P., Brandt, J.M., and Cork, B.W., 1982, Structure and intra-cooling unit zonation in welded tuffs of the unsaturated zone, Yucca Mountain, Nevada, a potential nuclear waste repository [abs.]: Eos, Transactions of the American Geophysical Union, v.63, no.18, p.330.
442. Scott, R.B., Whitney, J.W., and Fox, K.F., 1987, The upper crustal detachment system at Yucca Mountain, SW Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 19, no. 5, p. 332-333.
443. Sheppard, R.A., and Gude, A.J., 3rd, 1985, Diagenetic reaction of clinoptilolite to form mordenite in silicic vitric tuff from Yucca Mountain, Nye County, Nevada [abs.]: An International Conference on the Occurrence, Properties, and Utilization of Natural Zeolites, Budapest, Hungary, August 12-16, 1985, p. 17-18.
444. Shroba, R.R., Whitney, J.W., Taylor, E.M., and Fox, K.F., Jr., 1990, Quaternary movement on north-trending faults at Yucca Mountain, Nevada: Preliminary results [abs.]: Geological Society of America Abstracts with Programs, v. 22, no. 3, p. 83.
445. Sinton, P.O., 1989, Characterization of the large hydraulic gradient beneath the north end of Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 70, no. 15, p. 321.

446. Sinton, P.O., and Downey, J.S., 1986, Three-dimensional steady-state, finite-difference model of the ground-water flow system in the Death Valley ground-water basin, Nevada-California [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 942.
447. Sinton, P.O., Kolm, K.E., and Downey, J.S., 1989, A conceptual model of lineament/fracture zone controlled regional ground-water flow in the vicinity of Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 70, no. 43, p. 1088.
448. Snyder, D.B., 1981, Gravity interpretation of Yucca Mountain, Nye County, Nevada and its implications for southern Nevada structure [abs.]: Eos, Transactions of the American Geophysical Union, v. 62, no. 45, p. 1039.
449. Spengler, R.W., Byers, F.M., Jr., and Maldonado, Florian, 1982, Volcanic stratigraphy at Yucca Mountain, Nevada and its role in the multiple natural barrier concept of waste isolation [abs.]: Geological Society of America Abstracts with Programs, v. 14, no. 6, p. 350.
450. Spengler, R.W., and Kornreich, S.K., and Diehl, S.F., 1987, Pulsatory and sectorial aspects of the Topopah Spring Member of the Paintbrush Tuff in southern Nevada [abs.]: Abstract Volume, Hawaii Symposium on How Volcanoes Work, Jan. 19-25, 1987, p. 239.
451. Spengler, R.W., and Peterman, Z.E., 1989, Element mobility in the Miocene tuffs at Yucca Mountain, Nevada [abs.]: Second International Conference on Chemistry and Migration Behavior of Actinides and Fission Products in the Geosphere, Monterey Conference Center, Monterey, California, November 6-10, 1989, p. 54-55.
452. Stock, J.M., and Healy, J.H., 1984, Magnitudes and orientations of stresses in an extensional regime: Yucca Mountain, Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 6, p. 669.
453. Szabo, B.J., 1984, Uranium-series dating of fault related fracture and cavity filling calcite and opal in drill cores at Yucca Mountain, southern Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 6, p. 672.
454. Taylor, E.M., and Huckins, H.E., 1986, Carbonate and opaline silica fault-filling on the Bow Ridge fault, Yucca Mountain, Nevada--Deposition from pedogenic processes or upwelling ground water? [abs.]: Geological Society of America Abstracts with Programs, v. 18, no. 5, p. 418.
455. Taylor, E.M., Reheis, M.C., and McFadden, L.D., 1987, Secondary tobermorite in soils in southeastern California, southern Nevada, and north-central Wyoming [abs.]: Clay Minerals Society 24th Annual Meeting, p. 126.
456. Taylor, E.M., and Shroba, R.R., 1986, Morphology of secondary carbonate and opaline silica in soils of different ages at the Nevada Test Site, Nye County, Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 18, no. 6, p. 769.
457. Trautz, R.C., 1990, Determination of unsaturated-zone permeability and storativity using in situ gas injection tests, Apache Leap tuff site, Arizona [abs.]: American Institute of Hydrology 1990 Spring Meeting Program with Abstracts, p. 25.

- 458. Turner, A.K., and Kolm, K.E., 1989, Potential impacts of new three-dimensional geoscientific information systems on future geologic mapping and modeling activities [abs.]: Geological Society of America Abstracts with Programs, v. 21, no. 6, p. A100.
- 459. Turner, A.K., Kolm, K.E., and Downey, J.S., 1989, Potential applications of three-dimensional geographic information systems (GIS) for regional ground-water flow-system modeling, Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 70, no. 43, p. 1088.
- 460. Vaniman, D., Crowe, B.M., Gladney, E., Carr, W.J., and Fleck, R.J., 1980, Geology and petrology of the Crater Flat and related volcanic fields, south-central Great Basin, Nevada [abs.]: Geological Society of America Abstracts with Programs, v.12, no. 7, p. 540.
- 461. Waddell, R.K., 1981, Results of modeling regional ground-water flow near a potential nuclear-waste repository, Nevada Test Site and vicinity [abs.]: Geological Society of America Abstracts with Programs, v. 13, no. 7, p. 574.
- 462. Waddell, R.K., 1984, Solute-transport characteristics of fractured tuffs at Yucca Mountain, Nevada Test Site--A preliminary assessment [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 6, p. 684.
- 463. Waddell, R.K., and Erickson, J.R., 1984, Transport experiments in fractured tuffs at Yucca Mountain, Nevada Test Site [abs.]: Eos, Transactions of the American Geophysical Union, v. 65, no. 16, p. 206.
- 464. Weeks, E.P., 1990, Topographically affected air flow through Yucca Mountain, Nevada [abs.]: American Institute of Hydrology 1990 Spring Meeting Program with Abstracts, p. 25.
- 465. Whitney, J.W., and Harrington, C.D., 1988, Middle Pleistocene colluvial boulder flows on Yucca Mountain in southern Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 20, no. 7, p. A348.
- 466. Whitney, J.W., Shroba, R.R., Simonds, F.W., and Harding, S.T., 1986, Recurrent Quaternary movement on the Windy Wash fault, Nye County, Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 18, no. 67, p. 787.
- 467. Whitney, J.W., Swadley, W C, and Shroba, R.R., 1985, Middle Quaternary sand ramps in the southern Great Basin, California and Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 17, no. 7 p. 750.
- 468. Wilson, W.E., 1980, Status of geohydrologic investigations that are part of the Nevada Nuclear Waste Storage Investigations Program [abs.], *in* Proceedings of the 1980 National Waste Terminal Storage Program Information Meeting: Office of Nuclear Waste Isolation Report ONWI-212 (addendum), p. 8-9.
- 469. Wilson, W.E., 1985, Hydrologic investigations to evaluate a potential site for a nuclear-waste repository, Nevada Test Site [abs.]: Geological Society of America Abstracts with Programs, v. 17, no. 7, p. 752.
- 470. Wilson, W.E., 1988, Hydrologic setting of Yucca Mountain, Nevada [abs.]: Geological Society of America Abstracts with Programs, v. 20, no. 3, p. 243.

471. Wilson, W.E., Dixon, G.L., and Glanzman, V.M., 1982, U.S. Geological Survey investigations of volcanic rocks at the Nevada Test Site for disposal of nuclear waste [abs.]: Geological Society of America Abstracts with Programs, v. 14, no. 6, p. 354.
472. Wilson, W.E., and Younker, J.L., 1989, The role of hydrogeologists in evaluating Yucca Mountain as a repository site for high-level radioactive waste [abs.]: 28th International Geological Congress, v. 3, p. 369.
473. Wright, L.A., Drake, R.E., Troxel, B.W., and Thompson, R.A., 1986, Central Death Valley volcanic field, eastern California: Tectonic setting, volcanic stratigraphy, and geochronology [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 1262.
474. Yang, I.C., 1986, Climatic changes implied from organic carbon and carbon-14 analyses of lake-sediment cores, Walker Lake, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 67, no. 44, p. 935-936.
475. Yang, I.C., 1987, Chemical evidence of preferred water flow paths in unsaturated fractured tuffs, Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 68, no. 16, p. 316.
476. Yang, I.C., Montazer, Parviz, and Sayre, T.M., 1985, Pore-water extraction of unsaturated zone tuff by triaxial compression [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, no. 46, p. 883.
477. Yang, I.C., Peters, C.A., Thorstenson, D.C., and Woodward, J.C., 1988, Monitoring of soil-gas movement in the vadose zone borehole at Yucca Mountain, Nevada [abs.]: Eos, Transactions of the American Geophysical Union, v. 69, no. 44, p. 1223.
478. Yang, I.C., Sayre, T.M., and Davis, G.S., 1990, Comparison of porewater extraction by triaxial compression and high speed centrifugation methods [abs.]: American Institute of Hydrology 1990 Spring Meeting Program with Abstracts, p. 26.
479. Younker, J.L., Wilson, W.E., and Sinnock, Scott, 1986, Ground-water travel time calculations for the potential nuclear waste repository site at Yucca Mountain, Nevada [abs.]: American Chemical Society, Abstracts of Papers, 192nd ACS National Meeting, Anaheim, California, Geochemical Technical Session No. 82.
480. Zielinski, R.A., Bush, C.A., Spengler, R.W., and Szabo, B.J., 1984, Rock-water interaction in ash-flow tuffs, Nevada Test Site--The record from uranium studies [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 6, p. 704.

INDEX

- Aerial photographic studies: 192, 194, 195, 287
- Aeromagnetic
 - Anomalies: 10, 11, 28, 187, 335
 - Maps: 26, 94, 131, 132, 135, 139, 143, 186, 217, 218, 237, 290, 292, 293
 - Studies: 16, 95, 185
- Age dating:
 - $^{40}\text{Ar}/^{40}\text{K}$: 21, 46
 - Fission track: 176, 320
 - Radiocarbon: 12, 17, 18, 122, 313, 314, 315, 474
 - Rock-varnish: 102, 106, 381
 - Uranium-series: 29, 122, 170, 272, 273, 274, 275, 320, 453
 - Uranium-trend: 122, 208, 209, 264, 427
- Amargosa Desert: 19, 63, 64, 65, 95, 178, 259, 275, 357, 388
- Amargosa River drainage: 122, 127
- Bare Mountain: 24, 25, 29, 159, 191, 268
- Beatty scarp: 103, 267, 269
- Bibliography: 86, 87, 88, 89, 90, 91, 93
- Calcite/silica: 32, 63, 152, 264, 273, 274, 275, 300, 309, 453, 454, 456
- Caldera: 21, 46, 78, 236, 319, 337, 338, 340, 369, 436
- Calico Hills area: 2, 7, 64, 120, 133, 134, 181, 220, 236, 237, 245
- Carbonate deposits: 101, 152, 153, 170, 193, 208, 238, 273, 275, 308, 454, 456
- Clay: 56, 130, 187, 231, 232, 316, 443, 455
- Climate: 17, 18, 37, 101, 238, 239, 240, 274, 278, 308, 314, 387, 388, 474
- Computer:
 - Methods (borehole): 41, 171, 288, 322, 325
 - General: 334, 390, 458, 459
 - Plotting guide (GSMAP/GSDRAW): 223
 - Soil index template: 277
- Programs
 - Aquifer transmissivity: 41
 - FREQFIT: 118
 - Fortran 81: 325
 - GEOTRANS: 222
 - Gravity and magnetic: 297
 - HANDTC: 250
 - POLYGON: 38
- Conodont: 26
- Core samples (data from): 2, 3, 4, 5, 7, 15, 43, 44, 96, 97, 130, 142, 151, 206, 207, 212, 213, 228, 242, 247, 249, 274, 302, 303, 317, 320, 323, 324, 325, 453, 474
- Crater Flat: 28, 30, 32, 63, 64, 103, 131, 261, 275, 284
- Death Valley: 98, 195, 446, 473
- Death Valley/Furnace Creek: 20, 29, 47, 48, 52, 65, 291, 294, 357
- Drill hole (borehole/core hole):
 - J-12: 283
 - J-13: 23, 85, 164, 165, 198, 219, 221, 245, 283
 - UE16d: 57
 - UE16f: 57, 219
 - UE17a: 115, 219, 299
 - UE17e: 116, 219
 - UE-25a#1: 3, 29, 96, 198, 219, 220, 247, 274
 - UE-25a#3: 2, 53, 134, 151, 219, 220

Drill hole (borehole/core hole)--Continued

- UE-25a#4: 5, 55, 221, 249
- UE-25a#5: 5, 55, 97, 221, 249
- UE-25a#6, #7: 5, 55, 221, 249
- UE-25b#1: 138, 198
- UE-25b-1H: 142, 221
- UE-25c#1: 110, 198
- UE-25p#1: 26, 42, 44, 110, 173, 198, 221, 245, 255
- UE-29a#1, a#2: 295
- USW G-1: 22, 67, 207, 219, 221, 245, 254, 320
- USW G-2: 29, 150, 198, 207, 245, 251, 253, 254, 273
- USW G-3/GU3: 4, 29, 110, 198, 206, 207, 221, 228, 245, 253, 273, 320
- USW G-4: 4, 9, 14, 109, 198, 221, 242, 245, 300
- USW H-1: 198, 212, 213, 221, 298
- USW H-3: 198, 221, 284, 285
- USW H-4: 68, 198, 221, 245, 302, 303
- USW H-5: 15, 198, 221, 245
- USW H-6: 43, 198, 221, 245
- USW VH-1: 28, 85, 198, 207, 218, 221, 283
- USW VH-2: 32, 221
- WT-series: 85, 174, 190, 221
- USW UZ-7: 136
- Drilling methods/techniques: 99, 100, 136, 213, 282, 283, 285, 302
- Earthquake data: 16, 84, 104, 105, 134, 156, 182, 200, 201, 202, 203, 276, 291
- Electrical surveys: 71, 72, 80, 119, 120, 121, 186, 230, 233, 234, 319
- Electromagnetic properties/soundings/surveys: 71, 72, 79, 133, 226
- Erosion: 33, 34, 37, 122, 238, 291
- Evapotranspiration: 49, 359, 360, 371
- Fault(s):
 - Detachment: 19, 29, 77, 78, 98, 147, 224, 402, 403, 412, 442
 - Filling materials: 32, 150, 152, 272, 453, 454
 - Late Cenozoic: 192, 195, 264, 348
 - Movement: 29, 226, 275, 444, 466
 - Quaternary: 20, 29, 77, 191, 194, 264, 281, 291, 414, 444, 466, 467
 - Scarp: 103, 194, 267, 269
 - System: 20, 147, 281, 318, 432
 - Trench, identified in: 261, 264, 318
- Flood studies: 37, 251, 296
- Fractures (general): 327, 330, 383, 408, 413, 447
 - Behavior: 166
 - Core analysis: 26, 115, 116, 150, 151, 228, 241, 242, 247, 249
 - Filling: 29, 150, 228, 242, 273, 274, 300, 320, 453
 - Flow: 68, 82, 137, 328, 384, 396, 398, 445, 459, 460
 - Networks: 8, 328, 329, 331, 332, 333, 334
 - Outcrop studies: 9, 229, 245, 287
- Fractured tuff/rock: 68, 82, 160, 161, 367, 405, 407, 413, 462, 463, 472
- Franklin Lake: 49, 50, 353, 356, 357, 359
- G-tunnel: 154, 426
- Gaseous-phase: 289, 315
- Geohydrologic data: 14, 15, 42, 43, 44, 49, 57, 68, 136, 138, 141, 142, 212, 282, 284, 285, 295, 296, 299, 302, 303
- Geologic maps: 80, 114, 143, 144, 145, 147, 148, 149, 159, 227, 260
 - Index, Nevada: 75
 - Surficial: 193, 258, 262, 263, 265, 267, 268

Geochemistry: 46, 337
 Geomorphology: 102, 106, 122, 127, 238, 381, 387, 418, 456
 Geophysical logs: 15, 32, 42, 53, 54, 55, 96, 97, 109, 110, 136, 138, 141, 151, 172, 173, 174, 177, 178, 180, 181, 187, 212, 213, 235, 241, 242, 247, 282, 283, 284, 285, 286, 302, 325, 384, 411, 416
 Grain size: 97, 317
 Granite: 29, 120, 176, 181, 185, 186, 234, 246, 295
 Gravity: 1, 32, 121, 178, 185, 186, 187, 189, 190, 215, 234, 235, 236, 237, 245, 297, 321, 368, 382, 392, 410, 448
 Borehole: 109, 110, 235
 Maps: 27, 111, 132, 185, 186, 188, 214, 216, 235, 236
 Network: 107
 Stations: 108, 129, 189, 190, 215, 237
 Ground water:
 Chemistry: 12, 13, 14, 15, 44, 138, 142, 143, 212, 213, 282, 302, 303, 312, 356, 357
 Flow: 47, 51, 52, 63, 64, 65, 82, 211, 294, 350, 351, 352, 354, 361, 461, 475, 479
 Levels: See Water level
 Models: See Models, hydrologic
 Systems: 47, 48, 51, 52, 162, 183, 211, 296, 353, 354, 361, 401, 430, 446, 459
 Heat flow: 16, 29, 64, 219, 220, 221, 429
 Hydraulic tests (general): 405, 407
 Borehole flow survey: 13, 14, 15, 42, 43, 44, 138, 141, 142, 285
 Injection: 14, 15, 42, 43, 57, 68, 138, 141, 142, 212, 213, 282, 283, 285, 298, 303
 Pumping: 14, 15, 42, 43, 44, 112, 138, 141, 142, 212, 213, 282, 283, 284, 285, 295, 302, 303
 Recovery: 42, 44, 212, 213, 282, 283, 296
 Swabbing: 282, 284, 285
 Tracer: 57, 68, 82, 212, 213, 284, 296, 302, 303, 368, 399, 400
 Hydraulic gradient: 64, 355, 445
 Hydrofracture: 112, 228, 253, 254
 Isotherm, Curie-temperature: 16
 Isotope studies: 30, 152, 157, 208, 209, 228, 272, 273, 274, 300, 313, 315
 Jackass Flats: 37, 131, 145, 170, 185, 230, 263, 276
 Lineaments: 29, 183, 192, 194, 195, 287, 447
 Lithology: 14, 15, 26, 28, 32, 42, 56, 57, 115, 116, 120, 136, 141, 150, 151, 181, 212, 213, 228, 241, 243, 247, 249, 282, 284, 285, 299, 303
 Lone Mountain pluton: 144
 Magma: 21, 340, 436, 437
 Magnetic: 121, 187, 234, 392
 Borehole studies: 7, 26, 97, 207
 Anomalies: 10, 11, 16, 131, 297
 Profiles: 129, 186, 187, 226
 Properties: 2, 3, 7, 10, 11, 31, 70, 97, 207, 425, 426
 Surveys: 237
 Magnetotelluric: 80, 119
 Matrix saturation: 136, 298
 Meteorology: 50, 83, 101, 157, 278, 336, 372, 375, 377, 386
 Mineral resources/Mineralogy: 21, 29, 121, 130, 146, 150, 228, 234, 316
 Modal analysis: 179, 228, 241
 Model:
 Desert soils: 153
 Gravity and magnetic: 298, 410
 Hydrologic: 44, 52, 126, 128, 162, 211, 229, 294, 326, 334, 349, 350, 351, 352, 355, 374, 390, 393, 397, 398, 409, 413, 446, 447, 459, 461

Model--Continued

Paleozoic rocks: 26
Teleseismic velocity: 158
Uranium-trend, empirical: 208
Ostracode: 17, 18, 74
Pack rat midden: 239, 240, 278
Paleoclimate: 153, 170, 239, 240, 282, 309, 314, 388
Paleohydrology: 74, 152, 170, 309, 364, 380
Paleolimnology: 17, 18
Paleomagnetic: 147, 204, 205, 206, 207, 226, 249, 423, 424, 425, 431, 439
Permeability: 13, 23, 164, 165, 167, 168, 457
Petrography: 21, 26, 31, 56, 150, 229, 320, 450
Petrology: 341, 460
Photogrammetry: 39, 40, 69, 155, 190, 370
Physical properties: 56, 96, 121, 125, 138, 229, 235, 247, 282, 395
 Density: 56, 109, 110, 112, 121, 187, 219, 235, 237, 253, 255
 Density (core measurements): 2, 3, 4, 151, 247
 Density, bulk: 2, 3, 4, 185, 186
Pore fluid: 23, 164, 165, 167, 168, 169, 316, 476, 478
Porosity: 2, 3, 4, 68, 219
Potential sites: 58, 59, 60, 61, 66, 123, 342, 469
Potentiometric (maps/surface): 197
Pre-Tertiary rocks: 6, 26, 57, 71, 78, 115, 116, 121, 124, 143, 147, 187, 196, 245, 291
Radioelement: 22, 184, 336, 451, 480
Recharge: 47, 162, 295
Recovery: 57
Remote sensing: 183
Resistivity: 2, 3, 4, 6, 54, 70, 79, 95, 120, 178, 230, 233, 234
Rock properties: 2, 3, 4, 5
Seismic reflection: 19, 103, 121, 154
Seismic refraction: 1, 117, 121, 134, 175, 181, 185, 237, 256, 257, 347, 410
Seismicity: 29, 33, 34, 35, 36, 84, 104, 134, 156, 158, 182, 200, 201, 202, 203, 276, 291
Soils: See Surficial deposits
Soil-moisture: 50, 101, 371, 394, 404, 420, 421, 422
Specific capacity: 2, 3, 4, 41
Stratigraphy: 21, 26, 56, 109, 147, 150, 173, 174, 228, 229, 241, 242, 243, 244, 245, 280, 449, 460
Stress: 77, 104, 112, 203, 252, 253, 254, 255, 270, 271, 291, 385, 438, 452
Structure: 32, 78, 147, 150, 196, 226, 236, 241, 244, 341, 343, 344, 347, 382, 420, 434, 439, 440, 441, 448
Surface water: 17, 18, 37, 127, 251, 295, 312
Surficial deposits/soils: 122, 125, 130, 131, 153, 170, 193, 208, 209, 238, 264, 271, 276, 291, 417, 418, 427, 455, 456, 465, 467
Syncline Ridge: 6, 57, 71, 115, 116, 121, 124, 187, 291
Tectonics: 16, 28, 29, 30, 31, 33, 34, 35, 36, 76, 77, 78, 203, 224, 225, 226, 291, 327, 341, 343, 344, 345, 346, 348, 376, 433, 435
Teleseismic: 158, 406
Teviewer, borehole: 26, 112, 212, 213, 253, 254, 255
Thermal conductivity: 219, 220, 221
Timber Mountain: 21, 31, 132, 319, 337, 338, 340, 369
Topography: 125, 127, 233, 270, 271, 286, 291, 311, 464
Trench: 69, 122, 152, 208, 261, 264, 267, 270, 279, 300, 318, 370
Tunnel: 39, 155, 428
Twinridge pluton: 143

Unsaturated:

Tuff/rock: 169, 180, 229, 280, 298, 301, 316, 374, 397, 399, 407, 408, 409, 475, 476

Zone: 50, 73, 99, 100, 126, 137, 160, 161, 162, 163, 210, 211, 226, 229, 286, 308, 215,
326, 379, 384, 389, 390, 395, 396, 404, 416, 441, 457, 475, 476, 477

Volcanism: 21, 28, 29, 30, 31, 33, 34, 35, 36, 45, 46, 76, 77, 236, 291, 346, 348, 473

Wahmonie: 120, 181, 184, 186, 234

Walker Lake: 17, 18, 314, 317, 474

Water, chemical analysis: 17, 23, 57, 164, 165, 212, 213, 283, 299

Water level: 14, 15, 43, 44, 57, 83, 85, 138, 141, 142, 185, 197, 198, 282, 284, 285, 299, 302,
309, 378, 401

Water table: 64, 65, 309, 310

U.S. GOVERNMENT PRINTING OFFICE: 1991-835-214